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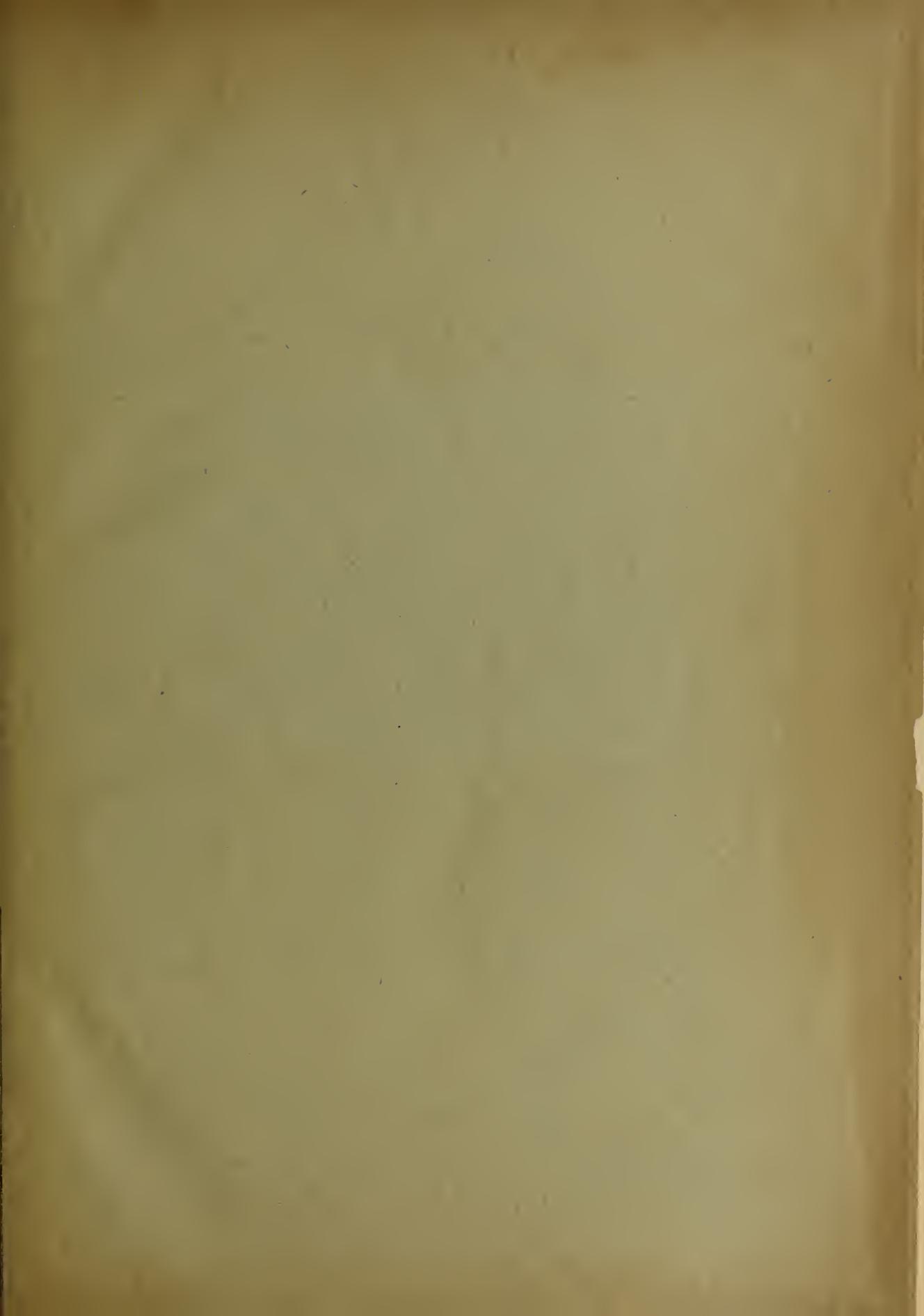


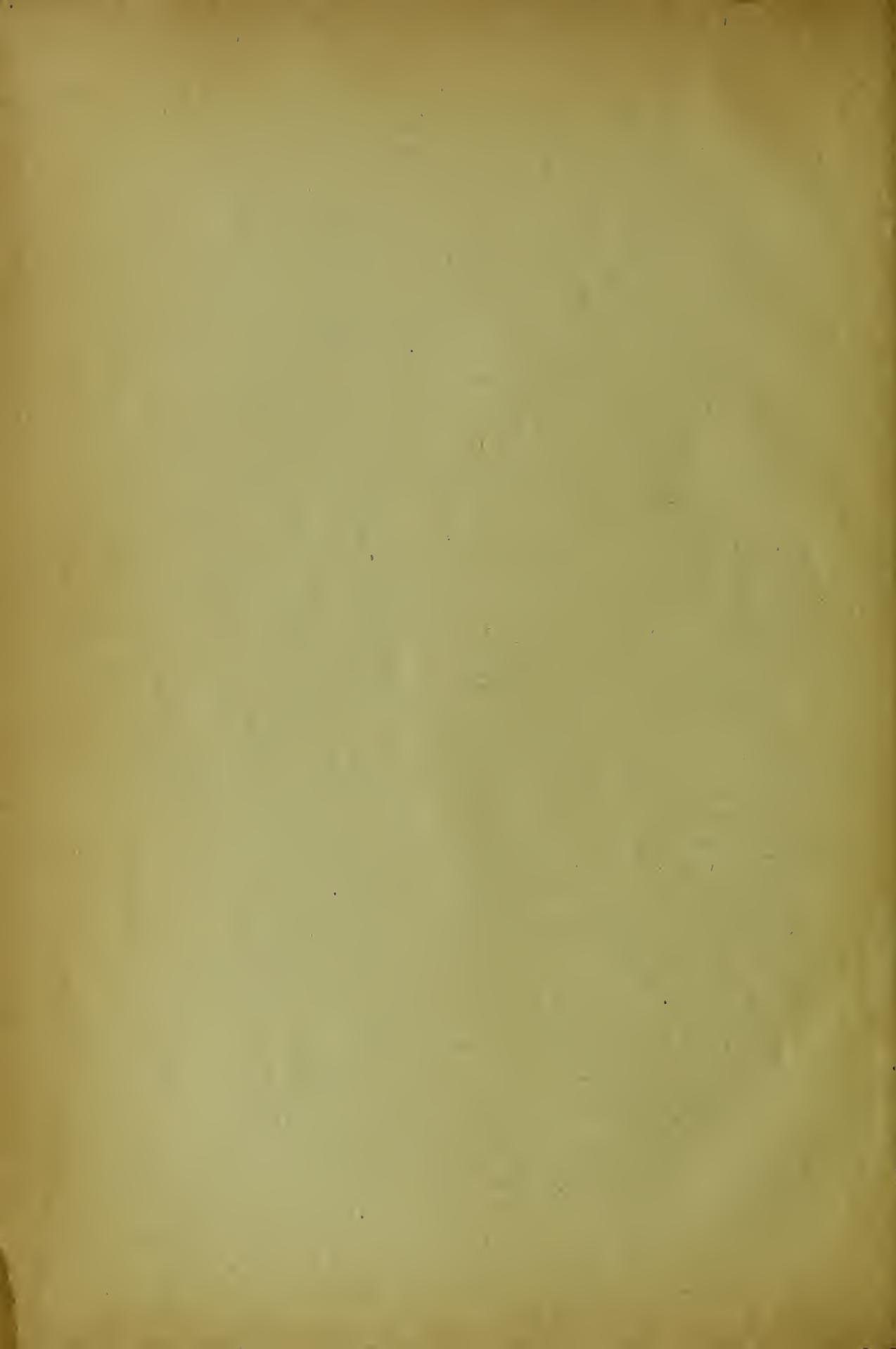
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THE JOURNAL
OF THE
KANSAS MEDICAL SOCIETY

PUBLISHED MONTHLY BY THE
KANSAS MEDICAL SOCIETY

EDITED BY
WILLIAM E. McVEY, B.S., M.D.
UNDER SUPERVISION OF THE COUNCIL

VOLUME XX
JANUARY 1920 TO DECEMBER 1920 INCLUSIVE

TOPEKA, KANSAS
1920

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THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, JANUARY, 1920

No. 1.

Encephalitis Lethargica

A. L. SKOOG, M. D., Kansas City.

Read before the Kansas State Medical Society, Ottawa,
May, 1919.

Within the past few years a comparatively small number of cases with a clinical syndrome suggesting distinctly a definite disease entity, has been reported from various widely separated localities of the world. This newly recognized, or revived disease, has been given several names, as follows: encephalitis lethargica, used first by Economo, but later criticised by other authors on account of an etymological defect; epidemic encephalitis, seemingly the least objectionable name; L'encephalite lethargique epidemique; poliomesocephalite primitive avec narcolepsie; and nona an obscure term of Italian origin.

The lay public has been introduced to this disease through various press articles and editorials under the caption of "Sleeping Sickness" during the past few months. This term should not be used in connection with the disease under discussion. Above all it should not be confused with trypanosomiasis, "sleeping sickness" of South Africa, which only follows the bite from the tsetse fly.

Epidemiological studies indicate that this disease may have followed the influenza epidemic, or rather occurred during its later period. The cases appear in the late winter and spring season. Two or more cases in a single family are not reported. The nature of the epidemic is definitely sporadic. The cases narrated from various countries are widely scattered, and never do a large number of

afflicted individuals appear in any one locality.

From January to April 1919, cases have been appearing sporadically in various sections of the United States, Basoe², Ely³, Pothier⁴, Mills and Wilson⁵, and others have reported them. I could detail three classical cases of my own, one from Kansas in April, one from Missouri in February and another from the Kansas-Missouri State Line region of greater Kansas City in March.

The French and English cases, described by Nettier⁶, Wilson⁷, et al, appeared during the late winter and spring of 1918. Austrian and Australian cases have been reported by Economo and Breinl⁸, for the early part of 1917.

Prior to 1917 no other cases are recorded until back in 1890 when there was a similar epidemic in Northern Italy, Austria Hungary and other European countries. The name Nona appeared in connection with this disease at that time.

To convey to your mind something relative to the clinical picture of the diseases, I am reporting briefly one of my representative cases as follows:

Case L. O.—I am indebted to Dr. Frederick Lowe, of Kansas City, for being consulted about the case. Age 15. He was a second year high school boy and considered exceptionally bright; he was of Hebrew parentage and had some neurotic evidences. The past history was negative, excepting he had always been considered a delicate child.

PRESENT HISTORY: The onset of his illness was stated to have been rather sud-

den on March 2nd, 1919, at which time it was recorded that he had a temperature of 103 degrees. He rapidly became somnolent and even stuporous; his apathetic and lethargic state remained one of the chief symptoms for about two weeks, during which time he could always be aroused to take food and drink. At times there was much difficulty in getting him to take even liquid nourishment. The temperature continued only a few days. There was some mild impairment of vision, and photophobia was noted. When questioned at the time of the examination he said he saw double. At times the family would make statements that L. was asleep and could not be aroused; later the patient would state that he heard what was said, but could not arouse himself sufficiently to reply.

EXAMINATION: My first examination was made on March 6th, at which time I found the boy in a markedly asthenic lethargic or stuporous state. He could be aroused and give replies but his replies were short and indifferent, even irrelevant or disorientated on a few occasions. The facies of the patient was striking. The eyelids were drooping and only partly open when replying to questions. He had a mask-like expression and never were any emotional evidences displayed. The tongue was much coated, some fever was present, and other evidences of intoxication were observed. He was able to walk but with a peculiar ataxic asthenic and feeble gait. All movements were somewhat incoordinate or ataxic. All forms of sensation were well preserved. Some tremor was present, observed in outstretched fingers and tongue. A mild positive Kernig sign could be demonstrated.

The pupils were equal and reacted to light and accommodation but diminished. The ophthalmoscope revealed some blurring of the discs; no cupping could be outlined. The retinal veins were overfilled. The ptosis was extremely marked; it was difficult for him to open his eyes one-third that of the normal. A variable squint was

present. There was decided weakness of all the oculo-motor cranial nerves; the right external rectus was less palsied than the left. All eye ball movements were restricted; there was a tendency to nystagmoid movements when looking to extreme left or right. There was an undoubted palsy of the twelfth cranial nerve of a mild degree; the tongue could hardly be projected as far as the teeth.

At the end of about two weeks a definite improvement began which continued for about three or four weeks. After improvement was well begun an abnormal appetite appeared. All the symptoms have disappeared and he is now working, doing a full day's work. The blood analysis on March 7th, gave 4,500,000 erythrocytes and 19,000 leucocytes, of which 78 per cent were polymorphonuclears, 13 per cent large and 6 per cent small lymphocytes, and 3 per cent transitional. The lumbar puncture performed on March 7th, registered a water pressure of 250 m. m. and after withdrawing 25 c. c. of the spinal fluid was reduced to 100. There were 44 lymphocytes per cu. m. m. There was a mild increase in the albumin and globulin content. The goldsol and Wassermann tests were negative.

The diagnosis in this case is undoubtedly encephalitis lethargica. The symptoms and clinical course were rather classical. The lymphocyte count in the spinal fluid was a little higher than is usually reported, but with syphilis and poliomyelitis ruled out, this factor need not disturb our diagnosis. Botulism and neuropsychiatric complications following influenza can be ruled out readily.

PATHOLOGY: All of the autopsied cases that have been reported, especially by Netter, Wilson, Economo, Lhermitte and Bassoe, et al, are practically agreed that the lesions in many respects resemble those found in acute poliomyelitis. There is a round cell lymphocyte and endothelial cell infiltration of a large area of the brain. Occasionally they are found scattered in the spinal cord, but to a much lesser degree. The infiltration is

invariably much more pronounced in the mesencephalon, pons and medulla of the brain; especially is the inflammatory process marked around the iter, so much so in fact that Wilson calls it a peri-aqueductal disease. Edematous and hypemic areas are encountered in the brain, especially in the mesencephalon. Small hemorrhages may be found in the brain tissues and the pia-arachnoid coverings of the brain. The infiltrations are especially marked around the small arteries and capillaries, some having their calibers completely occluded from the pressure. The nerve cells, especially in the mid-brain, show marked changes. Tigralysis is quite evident. Pigmented and hyaline degenerations are present.

ETIOLOGY: So far no organism has been demonstrated as the cause; blood and spinal fluid cultures are invariably negative. Wiesner⁹, has reported one case where he inoculated autopsied brain material into a monkey and produced a disease having similar clinical symptoms as in the human. The marked infiltration indicates that the disease is infectious and caused by some organism rather than being caused by an intoxication, such as botulism which has been seriously considered by the English. It is undoubtedly not related to influenza, although it is a striking fact that most of the epidemics have been reported as following influenza epidemics. It seems to be a close kin to acute poliomyelitis, but is caused by a different virus. In view of its sluggish or doubtful infective habits, the disease should be made reportable only when demanded by local and state boards of health during epidemic periods.

SYMPTOMS: One investigator has described general and localizing symptoms. The onset is sudden with a temperature increase, ranging from 101 to 103 degrees. Higher temperatures have been reported, and the pyrexia may last a few days, or a week or two. Occasionally cases are reported where no temperature was observed, which may mean it had subsided before observations were made. An

increase in the pulse and respiratory rate may be present. Nausea and vomiting has been observed in the early stage. Lethargy has been described under various degrees such as somnolent, lethargic, stuporous, comatose or asthenic. This is one of the most striking and most frequently present symptom. It produces a state of inertia which keeps the patient in one posture for an unusually long period. At times it is difficult to arouse the patient even to take water or nourishment. If aroused, they will reply in one or two words and continue to lie motionless. The facies is striking. With a partial ptosis and mask-like expression, Parkinson's disease is quickly recalled. They are devoid of all emotional expression. Catatonic states and attitude are observed; occasionally instead of lethargy, restlessness, delirium and delusions are present. Next in importance comes the oculomotor palsies. Usually the third, fourth and sixth cranial nerve are involved at the same time. The palsies are rarely complete and clear up slowly as the patient recovers. Nystagmus or nystagmoid movements are observed. The patient may complain of impaired vision. Photophobia may be present. Lingual, palatal, pharyngeal and laryngeal palsies have been described. The sluggishness of speech or disinclination to talk is largely a result of the asthenic state. Headaches of a moderate or more severe degree are frequently present. There are no true motor palsies in the spinal nerve region. All forms of peripheral sensation are preserved. The reflexes may be diminished, both superficial and deep. Tremors are observed, more especially if movements are attempted. Movements are frequently incoordinate or ataxic. A mild positive Kernig and nuchal rigidity of a mild degree may be present, which indicate meningeal irritations.

The blood findings are not very conclusive; a mild leucocytosis may be present.

The spinal fluid has been pathological in all my cases. There is a moderate increase in pressure. A lymphocytosis of

ten to forty cu. m. m. may be present. Some of the European observers report a slightly increased cell count in the spinal fluid in only a few of their cases. The albumin and globulin contents have been found in excess. The clinical findings may be emphasized by recounting an important triad of symptoms. (1) Lethargy with degrees and variations, (2) oculomotor palsies which as a rule are not complete, and (3) an initial toxic febrile state.

COURSE: There is much variation in the course of the disease reported. Seldom do cases recover in less than two months. Some of the cranial nerve paralyses continue for a number of months. The rapidity of returning functions corresponds to inversely the amount of damage in the brain stem. Some patients continue to have impaired neurological functions many months after the subsidence of the acute stage. The recovery or death rate is quite variable according to different reports. Economo reported six dying out of eleven cases, Netter seven out of fifteen, Wilson two out of thirteen and Bassoe four out of twelve. One of the latter's cases may have been an influenza.

DIAGNOSIS: In view of the infrequency of the disease, one might hesitate to make the diagnosis of an initial case in a community and probably a number of cases have been diagnosed as something else. Poliomyelitis of the polio-encephalic type may present the greatest difficulty to differentiate. The acute stage in this disease is no longer than in acute poliomyelitis. The region involved is different. The poliomyelitis cases occur in the summer and fall, while the encephalitis lethargica cases occur in winter and spring. We should be able to eliminate botulism, in that its pathology is represented by toxic reactions to the nerve tissues rather than infective. The complications following influenza have quite a different symptomatology and course. The various types of meningitis should present no serious difficulties.

TREATMENT: As soon as the diagnosis is made the patient should be put to rest in bed in a quiet, airy room, which should be darkened much of the time. Good general nursing and symptomatic care is demanded. It may be necessary to catheterize some patients. Hexamethylenamin may be given in three or four doses per day, 0.3 to 1 gram to the dose. I believe that one or more lumbar punctures especially for treatment should be resorted to in each case. In view of the pathological nature of the disease it would be worth while to attempt to give specific treatment by using immune sera, if the material was at hand.

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R

The Etiology of the Recent Influenza Epidemic

RALPH H. MAJOR, M. D.

Department of Pathology, University of Kansas, Rosedale

The recent epidemic of influenza has focused the attention of the entire medical world upon this disease as perhaps never before upon any one disease in such a short period of time. This epidemic found the world one vast armed camp and the medical profession organized with immense hospitals and well equipped laboratories, manned by a large number of physicians including many of the most skilled men of the profession. That these men worked unceasingly at their tasks and never for a moment flinched, the high mortality among military and civilian physicians eloquently attests.

While these men were working in the hospitals and laboratories to combat this scourge, they were unceasingly bending every energy to ferret out the cause of this epidemic, and to find some means of cutting down the enormous toll it was

exacting. And yet, in spite of this vast amount of labor the published reports of their observations reveal such a conflicting mass of evidence and such a wide divergence of opinion, that many observers not usually inclined to pessimism shake their heads and say, that we have come from this epidemic knowing but little more of it than we did when it appeared.

The past two years have witnessed a change in the entire world order, the profoundness of which we are as yet too close to properly apperciate. And along with these changes in our social state have come similar changes in many of our cherished medical ideas. Among these changes are those of our ideas on influenza, a disease which according to our text-books of last year, already out of date, was well understood both as to etiology and treatment. In these volumes we read that the bacillus of Pfeiffer causes this disease, a statement rarely challenged then, but now universally questioned. In looking up methods of treatment, we may read in the recent edition of a well known work on clinical medicine this remarkable statement. "I think I have found a true specific against this infection—the compound phenacetin pill. I am assured it is quite as specific against the influenza bacillus as quinin in ague and mercury in syphilis." But we won't be so unkind as to ask this distinguished physician what he thinks of his pill now.

The disease we today describe as influenza is of very ancient origin. Hippocrates mentions an epidemic in the year 412 B. C. which probably was caused by influenza. The first authentic outbreak occurred in the year 1387, another in 1411 and from this time until the present, epidemics have been frequent. The first great outbreak in North America occurred in 1580, this was followed by others in 1627, 1729, 1757, 1781, 1811, 1836, 1874, 1889 and finally the last and present epidemic in 1918-19. As we glance over these dates of the various epidemics we find that the world at large has suffered from nine great pandemics since 1580 and

that since that year, North America has been visited ten times.

The *B. influenzæ* it may be recalled was first isolated by Pfeiffer, who reported his findings in January 1892. This organism, Pfeiffer states, he first saw in a sputum preparation obtained from a patient in the spring 1890—the second year of the well known epidemic of 1889-90. This organism however he was not able to cultivate until during the after-epidemic of 1891-1892 when by employing blood in his culture media he isolated in pure culture the bacillus which has since been known as *B. influenzæ* or Pfeiffer bacillus. This organism is a small slender bacillus, staining rather faintly and irregularly, is Gram negative, grows very delicately upon blood agar and does not grow at all upon ordinary laboratory media. These properties, while in a sense quite characteristic, yet cannot fail to impress us as rather meager criteria by which to identify a pathogenic organism. If we had only the peculiarities of growth and staining reactions to identify micro-organisms, we could not distinguish between the usually harmless colon bacillus and the disease-producing typhoid bacillus, to mention only one well-known example and many similar instances can be recalled. So it is quite possible that we may be describing a group of organisms instead of a specific microbe—a fact of some importance in any discussion of etiology.

The prevalence of the *B. influenzæ* in the recent epidemic has shown a marked degree of variation. It is stated that when influenza first became epidemic in Germany last year, Pfeiffer himself began bacteriological investigations and was unable to grow his own bacillus from the cases. Later reports however indicate that the organism was subsequently recovered from many cases.

Soon after the appearance of the recent pandemic, we read from time to time in the daily press lurid acounts of the disease claiming it to be nothing more or less than old fashioned Bubonic plague of the pulmonary variety. Such accounts, how-

ever they may have chilled the heart of the layman, were never taken seriously by the medical profession. It was at once pointed out that as the plague bacillus is an organism readily identified and easily grown upon ordinary culture media, it was practically impossible that such an organism was overlooked by the hosts of bacteriologists all over the world who were examining the sputum of these patients almost daily in the wards and were in addition making bacteriological cultures from the lungs of every post mortem. The large numbers of studies that have appeared and are still appearing show that the laboratory workers have been extremely active in studying the etiological factors of the recent epidemic. Most of these reports have been published by medical men in the military and naval service of the government, who have had opportunities for studying large numbers of cases among recruits. Valuable investigations have also been carried on in many civil hospitals, where the cases although not so numerous were studied often in greater detail.

The reports of this vast amount of work are still coming in and in their present unsifted state, present much that is apparently conflicting. This is particularly true in reference to the bacteriological importance of the influenza bacillus of Pfeiffer, upon which naturally attention was at once focused.

Statistics have been described by some one as "dry facts." But at the risk of dwelling upon dry facts, I wish to pause a moment and see if the dates of the various epidemics in America, give us any possible information concerning this disease. Since 1729, epidemics have appeared in this country at an average interval of 28 years, the longest influenza-free interval being 38 years, the shortest 15 years. This average interval of 28 years cannot fail to strike us as emphasizing that an epidemic comes along about once in a generation.

The present pandemic which is popularly supposed to have started in Spain

and has been generally called Spanish influenza, despite the protests of many Spanish physicians who declare that they had no monopoly of the disease even in the beginning, struck the entire world with such unprecedented violence, that many claimed it as an entirely new disease. This point of view is however untenable, since a perusal of the literature of past epidemics, show us that physicians of preceding generations were familiar with the train of symptoms that we have seen the past year. Also we note, that while in the past the lesser complications of sinus infections, middle ear disease, empyema, etc., varied somewhat with the individual epidemic, yet in all of them the most feared complication and the frequent one, as now, was the development of pneumonia. Also it is of interest to note that just as we have christened this pandemic because of its supposed geographic origin, Spanish influenza, so in the past we find them described as Chinese influenza (or catarrh), Rusian influenza and Italian influenza.

In this country a somewhat similar train of events happened. In the very beginning many workers were unable to isolate the Pfeiffer bacillus but very shortly positive results were reported with increasing frequency. Whether this was due to an actual increased prevalence of the organism or was the result of improved bacteriological technique it is difficult to say. But we are at least safe in presuming that continued practice in studying this organism would lead to a more speedy recognition of suspected colonies on our culture plates.

Many of the reports from the military and naval hospitals have shown a high percentage of positive *B. influenzae* cultures. Keegan who studied the epidemic in the Naval Hospital at Chelsea Massachusetts, last August, had an opportunity of investigating one of the first outbreaks in this country. This epidemic at Chelsea was undoubtedly carried by patients and carriers aboard vessels coming from Europe and definite histories to this effect

were obtained from officers aboard these ships. Keegan stated in his article published in September that there was "every indication this outbreak will soon spread all over the United States," a prediction as we know, that was abundantly and rapidly fulfilled.

Keegan found no uniformity of results in sputum cultures or mouse inoculations of washed sputum. Cultures however taken directly from the lungs by lung puncture or at autopsy, showed the *B. influenzæ* in pure or mixed culture in 82 per cent of the cases and in pure culture in 31 per cent.

Opie who studied the epidemic at Camp Pike states that in the cases of influenza with bronchitis the sputum "almost invariably shows *B. influenzæ*, often in great numbers." He also found that the sputum from cases of influenza with lobar pneumonia, showed the presence of the Pfeiffer bacillus in 62 per cent of the cases while cultures made from the lungs at autopsy showed it in 86 per cent of the cases. In the cases of bronchopneumonia he found that the *B. influenzæ* at autopsy in the lungs of 89 per cent of the cases.

Stone and Swift who studied the influenza epidemic at Ft. Riley found the influenza bacillus to be the predominating organism in 35 per cent of naso-pharyngeal cultures from influenza cases and in 18 per cent of the sputum cultures from cases of influenza pneumonia. Their statistics show a greater number of cases showing pneumococci and streptococci than *B. influenzæ*. However, they emphasized the fact that although the "*B. influenzæ* had not been frequently encountered in the sputum or throat cultures of patients in that (this) locality during the year preceding the outbreak of this epidemic," yet during the epidemic it was isolated in a large number of cases.

Kinsella who studied the epidemic at Camp Lee found the *influenzæ* bacillus in sputum culture in 27 per cent and in throat cultures only five times out of 123 cases. He emphasizes, however, that the percentage of positive throat cultures was

too low since in direct smear he saw the bacilli in 26 per cent. He adds that "there is no doubt that the use of blood agar plates is ineffective in detecting cultures of the Pfeiffer bacillus in all cases in which they occur." Howard who studied the *influenzæ* epidemic at the Johns Hopkins Hospital found the influenza bacillus in the sputum cultures of about 10 per cent of the cases studied.

Wolbach has reported a very interesting series of observations made at Camp Devens. In his work he combined cultures made from the lungs with the results obtained from staining the lung tissue by methods demonstrating the bacilli in this organ. By use of this combined method, he found the *B. influenzæ* in 23 out of 28 cases, and in 14 of these in pure culture. Wolbach's pathological findings are also of great interest. In the early cases in which death has occurred within a few days, the lungs at autopsy are partially collapsed, show numerous small sub-plural hemorrhages are dark red, lax, and quite wet on cut section. The microscopic picture in this type of uncomplicated *influenzæ* pneumonia which he considers distinctive, consists of an acute alveolar emphysema with the deposit of a hyaline fibrinous material on the alveolar walls. In such lungs the *B. influenzæ* was the only organism that could be cultivated.

In the cases which lived ten days or more the lungs presented a somewhat different picture. They were rather nodular, showed extensive bronchitis, peri-bronchitis and broncho pneumonia. Microscopically, this type of lung shows a picture resembling somewhat that of the first group but it is masked by the later additional features of exudation and hemorrhage, these changes however, being secondary and due to mixed infection with the streptoccus and pneumoccus.

My own observations made at the Walter Reed Hospital are in accord with those of Wolbach. In the early cases at autopsy, the type of lung described by him was repeatedly seen and the *B. influenzæ* was also obtained but generally in association

with the streptococcus or pneumococcus. We also saw many lungs which presented one picture in one part of the lung but the other picture in another portion. In such cases however it was a common observation to find the influenza bacillus in pure culture in the moist red hemorrhagic portion of the lung while the older consolidated portion which resembled more an ordinary lobar pneumonia showed a mixed culture of *B. influenzæ*, streptococcus or pneumococcus.

In our cultural work blood agar plates were used in addition the so called chocolate media—blood added to agar at a temperature of 90 degrees Centigrade. This forms a fine dark brown culture media upon which the influenza bacillus grows quite luxuriantly and often in our own cases we found the Pfeiffer bacillus in large numbers upon such media while they did not grow at all upon blood agar or were overgrown by other organisms.

In looking over the results obtained by workers using only blood agar and having a low percentage of positive *B. influenzæ* cultures, it is hard to resist the feeling that these workers would have had a higher percentage had they used the chocolate media. The recent observations of Mac Callum would seem to confirm this impression. Mac Callum by the use of a special differential stain for the *B. influenzæ* has demonstrated them in large numbers in the lung tissues from cases, cultures of which taken from the lungs at autopsy, showed no *influenzæ* bacilli. This work which is still in progress bids fair to raise still higher the percentage of *influenzæ* bacilli occurring during this epidemic.

The above survey of reports, fairly representative I think, of a much larger amount of work, shows the divergence of results obtained at different localities by different workers. However, one fact stands out, that the recent epidemic has been accompanied by a wide spread prevalence of the influenza bacillus, in other words, a heavy infection with the bacillus of Pfeiffer—leaving aside for the moment

all consideration of this organism as the cause of the epidemic. While it is unquestionably true that this organism is found at times in the throats of normal individuals, yet it is surely not present so commonly in these persons as in the patients during this epidemic. Also we may note that if this organism is only a saprophyte as some would have us believe, why do we find it so commonly imbedded in the lung tissue and the only organism present in the midst of a definite pathological condition which has caused the death of the patient? All of the evidence I think tends to confirm its role as the cause of a distinctive pneumonia observed in these cases.

While all this work concerning the pathological anatomy and bacteriology of these cases has been carried on, the thought of course, uppermost in the minds of all has been, what is the etiological factor responsible for this recent pandemic?

Several workers notably Gotch and Wittingham have ascribed the disease to the micrococcus catarrhalis. Many have regarded the pneumococcus, especially those of that illusive and indefinite Type IV as responsible. Segale has described a streptococcus which he considers of importance. Nicolle's experiments with a filtrable virus obtained from the naso-pharynx of patients and injected subcutaneously, attracted much attention for a while. His experiments, while interesting were never perhaps altogether convincing, and in this connection it may be recalled that before Nicolle's publication, Keegan at the U. S. Naval Hospital in Chelsea injected the filtrate of washings from the nose and throat of influenza patients into the noses of nine healthy volunteers with absolutely negative results.

The influenza bacillus of Pfeiffer, as has been mentioned, stood at first rather low among the list of etiological possibilities, but as an increasing number of positive cultures was reported it came again into high favor. Recent reports however, have caused a rude shock to its partisans and administered at the same time a rather

upsetting blow to all of our previous ideas on influenza. In a series of carefully planned and executed experiments carried out upon 68 volunteers, Rosenau and his co-workers in Boston have found that they were unable to infect these persons with pure cultures of *B. influenzae* with filtered and unfiltered nasal and throat secretions, and even with the sputum of influenza patients. Similar work was carried out in San Francisco by McCoy and Richey upon 50 volunteers also with negative results.

Just how these findings are to be interpreted is a question difficult or impossible to answer at the present. It is hard to believe that all of these patients were immune from a previously unrecognized influenza or that their physical condition was so excellent as to render them absolutely resistant.

In the face of all of this mass of conflicting data, it is of help I think, to consider influenza from the clinical point of view and to attempt a correlation on our bedside observation with the laboratory findings. Many clinicians, notably Bloomfield and Harrop, who studied the epidemic at the Johns Hopkins Hospital, have emphasized that the disease we have named influenza is to be sharply differentiated from its complications.

Influenza is characterized by a brief incubation period, a sudden onset, great prostration, congestion of the mucous membrane of the respiratory tract and shows a marked leukopenia. It attacks large numbers, is very contagious and behaves in many ways like one of the acute exanthema—in other words a sort of a scarlatina without an eruption. Later, it may be complicated by other affections, notably pneumonia, and here is where the clinical and bacteriological confusion comes in. These observers while admitting the frequent occurrence of the *B. influenzae* and not denying the occurrence of a *B. influenzae* pneumonia, do not accept it as the etiological factor of the disease.

This point of view has many other analogies in medicine. The streptococcus in

scarlet fever for instance, in spite of its frequent occurrence, has always been able to successfully elude those who attempt to fasten upon it the charge of causing the disease. The same may be said for measles and small pox. Again, we all are familiar with the history of the hog cholera bacillus, long the orthodox cause of hog cholera, a disease we now believe to be due to a filtrable virus, yet showing usually this organism.

In studying the epidemiology of influenza, one point is especially noteworthy and it has been emphasized by many observers. The disease is most contagious during the incubation period while still unrecognized. This behavior, much like that of other acute exanthemata notably measles, helps us to understand its rapid spread, since, it is especially those patients who are developing the disease and wandering at large, that are a menace to the health of the community. This explains doubtless the rather painful yet evident break-down of all our vaunted prophylactic measures, especially attempts at quarantine and the widespread wearing of masks. Many observers feel strongly that the disease is not very contagious after it has once become established, and instances without number could be recounted, where doctor and nurse after working and living for weeks with influenza patients took a few days holiday and after circulating around in the outside world, promptly came down with influenza.

Taken all in all, the evidence tends to show that we have not yet fathomed the cause of this epidemic. Some virus obtains access to the body, paralyzes the leukocytes, probably breaks down other defenses and our patient comes down with what we call influenza. The *B. influenzae* is present or gains access to the patient's respiratory tract already irritated and weakened, and the patient develops a typical distinctive pneumonia which may remain so or may become complicated by a secondary invader, notably the pneumococcus and streptococcus.

The Physician and the Health Officer

W. H. WELLS, M. D., Coffeyville.

Read before the Montgomery County Medical Society, Nov. 2, 1919.

Every physician is a guardian of public health, and the people expect him to be interested in medical matters of a public nature just as they expect the lawyer to speak out regarding the legal aspects of public affairs or any other citizen to contribute his best thoughts upon public questions.

The opportunities and influence of the physician as an educator are greater than those of almost any other person. Nearly every person has a blind and implicit confidence in the word of some physician and the attitude of the people toward public health matters is the composite attitude of the physicians of a community. The knowledge and practice of many physicians in matter of public health is that of 5, 10 or 20 years ago and their ideas are adopted by the people on their visiting lists.

Few medical schools have given instruction in preventive medicine and almost the only physicians that can qualify as public health specialists are those who have been intensely public spirited and unselfish and have kept themselves up to date in all lines of medical progress.

But medical schools are now beginning to require courses in public health. State departments of health are insisting that physicians shall know and practice the most modern methods of public health procedure and the people, becoming educated by lectures and magazine articles, demand that family physicians shall practice modern preventive medicine. It will be necessary in the future that physicians shall take more and more interest in public health affairs. Gentlemen we cannot shut our eyes to this fact. If we do we will be swept off our feet and be submerged in an irresistible current known as public opinion. Every one has the same right to live be he soever vile and low, and conditions are shaping themselves

that the poor will have as many advantages to conserve life as the wealthy.

Let us not arrogate to ourselves, gentlemen, that this work cannot be done by laymen and unless we as medical men get in the band wagon we will be straggling foot pads and will pull the house down on our own ears. Physicians are often inclined to shirk public health work. They say the people do not appreciate the work of a health officer; that many persons resent interference with their personal liberties; that public workers make enemies and that the physician who practices preventive medicine soon loses his private patients, which I know, unfortunately, is too true.

Most physicians are compelled to give their attention to the work that pays a financial return. But a few pioneers have done public health work because it needs to be done, and by their sacrifices of private gain they have established preventive medicine as a specialty, which future physicians will exploit and make profitable.

Some physicians consider that they are under no obligations to practice preventive medicine. They say they are paid to treat sickness and not to do a health officer's work of placing restrictions upon a family. Those who employ a physician have a right to expect that he will advise them not only how they may recover from sickness but also how they may prevent the sickness from developing again in the future and from spreading the disease to other persons.

Anywhere in the registration area of the United States, and Kansas is included, the laws and sanitary code recognise these obligations and mandatory duties are imposed upon physicians.

The public health laws in the registration area impose a mandatory duty upon every physician that he shall give immediate notice, in 24 hours, of every case of infectious and contagious and communicable disease to the health officer of the city, town or village. Reporting communicable diseases is universally conceded to be

necessary in preventing their spread, and a physician can comply with the requirement without embarrassment, when the disease is evident and the diagnosis plain. But a physician is often censured by indignant citizens for making reports when the classic signs of the disease are undeveloped or the diagnosis uncertain.

Of course it is the implied duty of every physician to make a correct diagnosis, if possible, within 24 hours after he first sees the case. He is a diagnostician for the department of public health as well as for the private patient and it is his duty to make prompt use of all available means of diagnosis.

It is the privilege as well as the duty of every physician to avail himself of the diagnostic services of the health officer in every suspicious case. If the physician reports a suspicious case the health officer must assume the further responsibility for determining the diagnosis for making a final report on the case for preventing the spread of the disease.

The attitude of the physicians toward reporting cases depends largely upon the health officer. If the health officer is a political appointee with no special qualifications for the work, physicians will naturally have no confidence in him and will report cases only upon compulsion. But if the health officer is fairly up in diagnosis and is trustworthy, popular and honest, physicians will have confidence in him and will gladly consult him.

Physicians are entitled to the protection and support of the health officer in performing the unpleasant duty of giving the public the benefit of the doubt in suspicious cases, and in making a decision which involves the curtailment of the liberties of patients and their families when the signs of the disease are faint and obscure.

When the health officer is not obviously an expert diagnostician and does not enjoy the full measure of confidence of his medical brethren, the physicians have a large measure of excuse for their hesitation to report cases on suspicion. On the

other hand they have an obvious duty to perform in advising officers of appointments regarding qualifications of health officers. They know better than anyone else the abilities of candidates and their advice is invaluable in securing high grade men for the office.

Health officers have the unique distinction of forming almost the only official body that requires physicians to be up to date in their knowledge and practice and accurate in their diagnoses.

After a physician obtains a license to practice medicine there is no law that compels him to continue his studies or to make a further advance of his knowledge. He is allowed to practice the kind of medicine he learned 50 years ago in nearly every line except communicable diseases but he cannot handle that class of disease unless he keeps himself fairly up to date in knowledge.

Really each health officer is an inspector who reviews the work of family physicians in their management of communicable diseases and compels them to study whether they wish to do so or not. Health officers have a great influence in promoting knowledge and efficiency on the part of the physician. An expert health officer will lead and inspire physicians to study while one with inferior ability and an ugly nature will drive them to study for the protection of themselves and their patients against the unwise acts of the health officer.

It is a recognised fact that isolation must be had in all communicable diseases and it is useless for me to tire you with the procedures that follow.

Instituting quarantines, directing isolations and disinfections and discharging cases of communicable diseases are all official duties. The ideal condition is that in which the health officer and the physician work in close cooperation in all these matters.

A great hindrance to public health work is the lack of adequate medical attendance upon those of small or no finan-

cial means. Medical service in America is a matter of private contract between physician and patient. It is usually the custom of prosperous physicians to refuse to attend those who cannot pay a fee. The result is that about one-fourth of the people receive little or no medical attention. Public health, as I said before demands that every person receive competent medical attention and that the physician be paid for it.

There are certain diseases like small pox, tuberculosis and typhoid fever, which may be as totally exterminated as rattlesnakes have been, but we need cooperation between physicians and the people.

May I close by telling the physicians in my jurisdiction that my highest ambition and strivings will be to aid them. They have honored me far beyond my deserts or anything I deserve that I cannot find words to express my gratitude for the kindness, sympathy and cooperation which has been given me. Gentlemen, if I can assist you, command me.

R

A Statement by J. Ogden Armour.

In agreeing to the terms of the decree referred to in the attorney general's statement, Armour & Company have abandoned a position which was economically sound and which was unassailable from a legal standpoint, wholly because of our desire to bend the knee to public opinion—an opinion not justified by the facts but strong for all that.

Armour & Company at all times will do their part in co-operating with the Government to bring to an end the unrest now prevailing in the country and to terminate any suspicion of the public toward the great and vital industry in which they are engaged.

R

A Letter to Kansas Physicians.

Dear Doctor: I am glad to announce the reopening of the Public Health (Wassermann) Laboratory at the School of Medicine, Rosedale, Kansas, under the direction of Dr. Donald R. Black. This is made possible by the gift of federal funds which are available for venereal disease control. Physicians are, therefore, advised that for diagnostic purposes in the control of venereal disease, the laboratory

will examine free smears for gonococcus infection and the Wassermann blood test for syphilis.

It is definitely understood that these free examinations cannot be made a matter of charge to patient by attending physician. Mailing cases for sending in specimens can be obtained by addressing Public Health Laboratory, Rosedale, Kansas.

Physicians are reminded that the diagnostic laboratory of the State Board of Health remains at Topeka, where specimens for diagnosis in cases of suspected diphtheria, tuberculosis, epidemic meningitis, etc., should be sent addressed to Dr. S. E. Greenfield, 1105 West Tenth St., Topeka, Kansas.

The Water and Sewage laboratories of the Board are located at the University at Lawrence. Containers for sending in samples of water for examinations in cases of suspected pollution may be secured by addressing Prof. C. A. Haskins, C.E., Kansas University, Lawrence, Kansas.

Physicians are invited to use these laboratory facilities in the fullest extent for the control of communicable diseases. Sincerely,

S. J. CRUMBINE, M.D.,
Secretary State Board of Health and Collaborating Epidemiologist, U. S. P. H. S. for Kansas.

P. S.—All cases of communicable disease, including venereal diseases, are required to be reported immediately upon diagnosis.

R

How rich we would all be if we could sell our experience for what it cost us.

"Tis the privilege of youth not to think but age robs us of our freedom and makes us think."

"It is not so much what we know that makes men great and brings happiness but it is what we know of life."

"Drs. Wilson and McAllister opened a six bed hospital, The Marysville Hospital, in Marysville, the first of October.

"The religious press tells us that the water of the river Jordan is so impregnated with the germs of skin diseases that the health authorities have forbidden the people drinking it or bathing in it. Bathing in the Jordan was a cure for leprosy in Naaman's time (Read II Kings; Chapter V.)

"Dr. Roney is building a thirty bed hospital in Marysville which will be completed about the first of April.

THE JOURNAL
of the
Kansas Medical Society

W. E. McVEY, M.D. - - Editor

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Aristocracy in Medicine.

Wm. J. Mayo, in his presidential address at the annual meeting of the American College of Surgeons at New York City last October, sounded a warning concerning the future status of surgery, that may or may not interest the medical profession as a whole. In discussing the subject of medical education and especially the educational requirements for future admission to fellowship in the College of Surgeons—graduation from a reputable medical college, hospital training, state license, and special training (three years) in a special field of surgery—Dr. Mayo asks the following question: "Will not this have a tendency to make the surgeon a member of an aristocracy to the ranks of which the sons of rich men will be the only ones who will have easy entrance?"

The boy entering the grade school at seven years of age may complete his medical education, with a year of hospital internship, at the age of twenty-six. And three years of special training added to this will make him twenty-nine. Eight years of his majority must be spent in preparation for his life work in order to meet the standard of requirements for

recognition by the College of Surgeons. Eight years of the average man's time is no small investment, but add to this the fees and cost of maintenance for eight years and few men will see in surgery, even with most flattering reports of its financial possibilities, a very sure or safe investment. It does seem that only the sons of rich men will "have easy entrance" into this most desirable fold.

The same conditions may as readily be applied to medicine even without the additional three years of special preparation. The investment of time and money now required of the student in medicine is not justified by the average income of general practitioners. Many of those who are attracted by other things in medicine than its financial possibilities are seeking the short cuts, are associating themselves with the various cults or substitutes for real physicians. The process of raising the educational requirement for the practice of medicine has had a selective action upon the prospective candidates for medical degrees.

We have been creating an aristocracy in medicine for some time past. Only those who are induced by love of scientific pursuit or those who have ample financial backing find any attraction in the study of medicine now.

But it is not alone the educational requirement that is making an aristocracy of medicine, it is also the gradually increasing requirements for efficient practice—the equipment and the technical assistants that are now regarded as essential. No man, who has not an unusually large and lucrative practice or an independent income, can afford to equip his office for a thorough and complete examination. The average practitioner is forced to adopt the most primitive form of group practice. He sends his patient to the roentgenologist, the dentist, the oculist, the rhinologist, the neurologist, and sends his specimens to the nearest laboratory. Out of such a system, however, more intimate group formations will evolve with com-

plete equipment, specialists, and technical assistants for each group.

The members of such a group and the members of the staffs of hospitals where such facilities are available, are men of middle rank, for the true medical aristocrat is he who can afford and does possess all of these facilities for himself. He occupies the position to which we all aspire and which is accorded the greatest respect by the people.

In every group there must be one who leads and directs—finally dictates and then his associates become only helpers or assistants. So that the group will resolve itself into a leader and his followers and ultimately into the proprietor and his assistants and dependents.

R

Medical Education.

One of the problems which has greatly concerned the educators in medicine is to devise some plan by which the course of medical instruction can be further increased, yet permit the student to complete the course at twenty-five years of age.

It is claimed from certain investigations that have been made that those physicians who graduated before their twenty-fifth year have made greater progress, scientifically and popularly, than those who graduated after the twenty-fifth year.

These statistics are of value only when all the conditions are known. If the educational requirement for graduation can be completed in not less than eighteen years, then the student entering the grade school at seven could graduate in medicine at twenty-five, provided he lost no time from school and had no failures. If of twenty students who entered grade school at seven and lost no time, ten graduated in medicine at twenty-five and the rest from one to three years later, the conclusion would naturally be that the ten who graduated in schedule time had more facile intellects, learned more easily, than those who fell behind the schedule. The natural conclusion would also be that such men would make greater scientific prog-

ress after graduation—and for the same reason. If part of these men had lost one or more years from grade school, on account of sickness or other cause, but had completed the course in schedule time, it is hardly reasonable to expect less progress by them than by those who were uninterrupted in their course of study. Mental aptitude is a more important factor in determining the degree of progress than a few years difference in age at graduation.

Grant, however, that the most productive period of a man's life should not be too greatly encroached upon by his course of preparation, as an economic proposition. The question then arises as to what means should be adopted for shortening the course. Medical educators are rather firmly fixed in their opinion that the course in medicine is none too long and that the requirements for admission to the study of medicine cannot be modified without detriment to the student's efficiency. On the other hand there seems to be, among public school teachers and boards of education, a growing sentiment in favor of reducing the time required for grade and high school courses. Some are strongly in favor of an eleven months school year. This, with some changes in the course, would shorten the period considerably. Others favor the idea of shortening the course by eliminating non-essentials.

For some unexplained reason the element of time has been regarded as deserving particular consideration in the matter of education. Courses have been adopted to occupy the time which has been arbitrarily fixed for each department. This has been particularly true in medical education. The time spent in medical education has been, and is still, regarded as of definite importance. Four years of nine months each must be spent in the medical school. Although some schools give a continuous course, four terms of three months each, the medical student can receive credit for only nine months.

The personal element has received no

consideration, not in the public schools and certainly not in the medical schools. A large percentage of the pupils in the grade schools could easily complete in six years the work which now requires eight years. Two-thirds of those who graduate from the high school in four years could complete the course easily in three years if the too numerous social functions and semi-educational features were eliminated. A large per cent of the students in medicine who now complete the course of instruction in four years could do so in three years if permitted. Half of them could complete the course in three years if permitted to continue their studies without a three months intermission. All of them could complete the course in three years of nine months each if unnecessary verbiage were eliminated from the text books they are required to use, and the lecturers would confine their discussions to the essential points of their subjects.

Since a degree is only conferred upon those who have proved their proficiency in the various subjects in the curriculum, why should it matter how much time has been consumed in acquiring the proficiency—unless indeed the time should be too long? The man who is able to acquire the necessary proficiency in all the subjects in three years will certainly bring more credit to the school which graduates him than will one who has been able to acquire such proficiency only after six years of study, why not also then more than one who has required four years to gain proficiency?

To those who are most concerned in the economic loss occasioned by our present system of education one might suggest that the arbitrarily fixed time element be eliminated from the problem and the personal equation be given a proper value in its solution. Many young men with keen intellects and greedy students would find in the study of medicine an attractive field if unrestricted. Many older men, of steadier habits but slower intellects, would prefer to spend three

years of continuous study if thereby they might save a year to the productive period of their lives.

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Excerpts—By the Prodigal

QUITTING TIME.

"Nobody likes a quitter," is a stock phrase. The dislike is two-thirds true. There is a time to begin the study of medicine, a time to practice it and a time to quit practice.

The letting go or quitting time would seem to be the most trying time in a doctor's life. There is no clearly marked line of separation for letting go the practice like there is in beginning the study and practice.

There are two motives or factors to consider in beginning or quitting the study and practice of medicine. The first thought for study is: What will medicine make out of the man? That is an unknown quantity. He and time have to work out the answer. A careful analysis of his motive in taking up the study with a bearing influence of the opinion of other doctors whose advice he should seek will help him to answer the question of beginning.

The second factor—the time for the giving up period—is when the doctor is doing more harm to his fellow man than he is doing good. He may do this all the time or at any time. But such a one has mistaken his calling—is a misfit. It is the normal doctor who is now on trial for dotage. Dotage is the signal to quit active medicine. If the doctor or surgeon has exceptional knowledge and wisdom as shown by success, he may continue as a consultant. But "when those that look out of the windows be darkened and the grinders cease because they are few," and subsultus tendinum be present, retirement is in the offing.

Some other symptoms which help to diagnose dotage are: Troublesome forgetfulness, obstinacy, pig headedness, fadism, carrying old notions over from the past generation, said notions of practice having been proven false; contending that the former days and practice of medicine and surgery were better than the present more enlightened days and practices; contending that his practice is superior to that of all other doctors and surgeons; spending his time hating and cussing his competitor, who is getting his practice; being cross and crochety with what few

patients he has left; forced effort to do his work; carelessness in the upkeep of his person, dress and office; delay in attending to calls and a lack of punctuality in meeting his engagements and fulfilling his promises; a letting down of morale; intemperance and gormandizing. When a man gets beyond the virile age he wants more to eat.

Other symptoms might be mentioned, but when all of these symptoms are present in the doctor, or a few of the more salient ones, it is time for him to stand up and look around for a softer seat.

Before and while these dotage symptoms are developing, the subject must plan ahead and prepare a place in which to fill up and round out the remainder of his up-to-date, active, busy life, outside of medicine. But he should keep in speaking distance of it.

It is surprising to such an one (voluntary quitter) how easily and without a jolt the change is made if the way has been planned. Having schooled himself to duty and intelligent critical self examination he is in trim for the change. He is fitted to do the next thing most congenial to his nature. The most natural thing for him to take up is the pursuit he followed in his boyhood or early manhood. Should he be an exception to this rule he should be cautious and not enter into a business or calling he knows nothing about. So sure as he invests in such a venture, so sure he loses out. Every doctor should carry life insurance. It can be paid off during the productive period of life. He should plan for the letting go time of medicine. If it never comes he will be that much ahead. The doctor who does not do this and does not plan an easement for old age, but depends upon his waning practice in his dotage for his physical support, is not to be envied.

Nature is an exacting task master and yet she is good to man if he obeys her. Memory and forgetfulness play the leading part in old age. Memory continually recounts and lives over the success and pleasure of bygone days and the failures and disappointments and suffering of the past are shadowed into forgetfulness by oblivion. Blessed is the power of forgetfulness. The old voluntary quitter becomes satisfied and content in this less strenuous, less responsible life. He is happyfied by the advance and success of those who have taken his place in the medical arena. Nature hypnotizes his de-

sires and ambition and finally kisses the old doctor to sleep.

WORDS.

Medical Words and Phrases—Wise and Otherwise.—The Prodigal has been wrestling hip and thigh and catch as catch can trying to keep up with new medical words and terms. He has been told that there are 425,000 words in the English language. If that is true there are 400,000 of them in the medical nomenclature; more or less.

The ancient Hebrew language is said to have contained 500 words. The difference in the number of words in the two languages is noticeable. However, this lack of words may have caused the Hebrew's undoing. Inability, when angered, to find words to express their indignation or resentment against the offender favored the scatterment of the Israelites as a tribe or nation; but they have traveled around and picked up enough additional words on the outside to continue business. They are in evidence on the Pacific coast, notably in California, and they hold their own in business and in medicine with the native son. The native son, the Jap and the Hebrew on the Pacific coast are all christened with Hassayampa water. This water is obtained by digging for it in the bed of Hassayampi creek, a little stream, north of south, in Arizona. The natives dig in the sand for the fish, the water being so scarce that the fish carry their drinking water on their bodies in little pouches similar to the pouch of the opossum in which the latter carries its young. The person who drinks Hassayampa water or is christened with it can never tell the truth again.

It is to the credit of the Jew, however, that with these few words he had a Crumbine in the person of one Moses, who framed, enacted and enforced hygienic and health laws which have never been improved upon.

This shows that so many words are not needed by man to keep healthy or to be good. Each Israelite carried a little wooden paddle and made a latrine by digging a hole in the sand in answer to nature's signal and the excreta was covered up from sight and flies and fertilized the soil. These laws were rigidly enforced on their march through the wilderness. Their bodies were kept clean by frequent bathing in pure water. Outdoor exercise, fresh air, sunlight and fire did the rest. Their diet was restricted and gluttony was

punished. This obedience was obligatory and not voluntary. Man made law had no more effect than it has now in enforcing obedience. The rulers knew this. They knew also the ignorance, stupidity and superstition of their people. Hence they went up into the mountain or out on the desert or the wilderness and surrounded themselves with silent mystery, which got results. They studied out feats of legerdemain which mystified and overawed these superstitious people, for their own good.

They used the name of God as a placebo to command and enforce obedience to those laws. The leaders were justified in the deception. In no other way but by the fear of the wrath of the Almighty being wreaked upon them could these dirty, gluttonous, superstitious people be made to obey. And this was done with 500 words.

With 425,000 words for a starter the present generation is not wanting in words to express itself. Words are so plentiful now that they are used to conceal and cover over the meaning of what is said; or to mystify and impress the hearer; or there is a lack on the part of the speaker or writer to size up the intelligence and understanding of the hearer or audience.

How many of us can testify to failing to understand a technical paper read by a specialist before an average medical society. We went away feeling that we were in a class with Mulligan, who attended a lecture on philosophy. When Mulligan was asked how he liked the lecture and if he understood it, said, "Shure I daid. It was a foine lecture and I understood it parfectly; but I didn't know wat the man was talken about."

There was no such camouflage in those ancient hebrew days. There was no redundancy of words to cover or smother the meaning. Words and phrases are so abundant and prolific, like our currency now, that they are used to cover all discrepancies and, anticipating demands—free coinage.

The English language is growing. It will continue to grow and no member of the language body is developing faster than the medical right arm. Growth may be helpful or hurtful, a benefit or a hindrance, normal or abnormal. A little fat rounds out the form, fills in the inter-spaces and beautifies the body by giving its symmetry. But too much fat spoils it all. Query: Would it not be better to give each word one meaning? Individu-

alize each word rather than have one word represent several meanings. It is true that a mechanic needs plenty of tools to work with; but when he has so many tools that takes all of his time to look after them, he has no time for other work.

The Prodigal believes that if our scientific specialists would spend some of the time and energy now used in making so many tools, in familiarizing themselves with the tools in use, they would get better results. It would lessen the present acute running at the mouth—drooling. Translated, means to use more of the words in common use and not to strain the imagination and the language in coining new and meaningless words—soon to be scrapped.

By BOOKS.

A Manual of Obstetrics

By John Cooke Hirst, M.D., Associate in Gynecology, University of Pennsylvania; Obstetrician and Gynecologist to the Philadelphia General Hospital. 12-mo of 516 pages with 216 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$3 net.

In spite of the fact that some very large volumes are written on the subject of obstetrics, it seems to be quite possible to condense all that is of importance or value into a very convenient hand book. At least Dr. Hirst has done so and he has been quite liberal in the matter of illustration. This is a very excellent and a very instructive little book on a very large and very important subject.

Nervous and Mental Diseases.

By Archibald Church, M.D., Professor of Nervous and Mental Diseases in Northwestern University Medical School, Chicago; and Frederick Peterson, M.D., formerly Professor of Psychiatry, Columbia University. Ninth edition, revised. Octavo volume of 949 pages, with 350 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$7 net.

The ninth edition of Church and Peterson has been received. No very radical change appears. One or two chapters have been rewritten and some slight changes in the text of other chapters may be observed. However there is no pressing need for a complete revision. The facts that are known are already included and the field is well covered.

The Medical Clinics of North America.

Volume 3, Number 2. (The New York number, September, 1919.) Octavo of 270 pages, 35 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Published bi-monthly. Price per year, paper, \$10; cloth, \$14.

In the New York number of the Clinics.

(September, 1919) will be found some very interesting matter for study. The first clinic is by Warfield T. Longcope on Cerebral and Spinal Manifestations of Purpura Hemorrhagica. A clinic by Leo Buerger on Cystitis follows. Then there are clinics by Pisek on Disorders of Children; by Mosenthal on Retention of Waste Products in Nephritis; by Herrick and Dannenberg on Recurring Meningococcic Meningitis; by Chase on the Value of Chemical Blood Examinations; by Willis on Radium Therapy. One of the clinics of particular interest in this number is by Maurice M. Kahn on the Functional Diagnosis of the Heart. We would like also to mention particularly the discussion by Held on the Splenomegalies.

Manual of Obstetrics.

By Edward P. Davis, A.M., M.D., Professor of Obstetrics in the Jefferson Medical College, Philadelphia. Second edition, revised 12-mo of 478 pages, 163 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$3 net.

We have received the second edition of Dr. E. P. Davis' Manual of Obstetrics. It has been revised and new matter has been added on many subjects. It is a very convenient working manual and will be of considerable value to the young practitioner. The illustrations are sufficient in number and answer their purpose unusually well.

A Text-Book Upon the Pathogenic Bacteria and Protozoa.

For students of medicine and physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the University of Pennsylvania. Ninth edition, thoroughly revised. Octavo of 858 pages with 330 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$4.75 net.

Long recognized as one of the most exhaustive treatises on the subject, McFarland's text-book on Pathogenic Bacteria and Protozoa has reached its ninth edition, completely revised under the great difficulties contingent upon a prolonged army service, the latest edition shows how much has really been added to our knowledge of bacteriology during a comparatively short period. Many, however, will be disappointed in finding the discussion of influenzae still retains the theories and conceptions of the nineties with none of the conclusions of the observers of the recent epidemic.

SOCIETY NOTES

THE STAFFORD COUNTY MEETING.

The Stafford County Society met at 3 o'clock p.m. December 22 at St. John, Dr. H. H. Miner, president, in the chair.

There were present H. H. Miner, M. M. Hart, Macksville; J. C. Butler, W. L. Butler, F. W. Tretbar, W. S. Crouch, T. W. Scott, Stafford; L. E. Mock, J. T. Scott, St. John.

Election of officers for 1920 resulted in the selection of J. C. Butler, Stafford, president; J. J. Tretbar, Stafford, vice-president; J. T. Scott, St. John, secretary-treasurer.

The society voted to have a banquet following the regular meeting the second Wednesday in January at Stafford, and the chair appointed as a committee on arrangements T. W. Scott, W. S. Crouch and J. J. Tretbar.

The program committee for 1920 is composed of H. H. Miner, L. E. Mock, and F. W. Tretbar. Dr. H. H. Miner, Macksville, was placed on the program for the next meeting the second Wednesday in January and announced his subject, Acute Endocarditis.

All the members present expressed the desire that the meetings of the society be better attended and pledged themselves to do so. The meeting was the best of the year both in point of attendance and in enthusiasm, and bespeaks better things for 1920.

J. T. SCOTT, Secretary.

BOURBON COUNTY SOCIETY.

The Bourbon County Medical Society met in regular session at the Library building, Fort Scott, Monday evening, December 15, 1919, at 8 p.m., with the following members present: Drs. J. R. Newman, E. B. Payne, C. F. Young, E. D. Tanquary, L. W. Griffin, M. F. Jarrett, W. S. McDonald, and J. C. Lardner, Fort Scott.

Meeting was called to order by the president, Dr. J. R. Newman. Minutes of the last regular meeting were read and approved. After attending to the regular business, and there being no scientific program for the evening, the following officers were elected for the ensuing year:

President, Dr. R. Aikman, Fort Scott; vice president, Dr. C. F. Young, Fort Scott; secretary, Dr. J. C. Lardner, Fort Scott; treasurer, Dr. M. F. Jarrett, Fort Scott. Censors—Dr. J. D. Hunter, Fort Scott, term expires December, 1920; Dr. W. S. McDonald, Fort Scott, term expires December, 1921; Dr. E. B. Payne, Fort Scott, term expires December, 1922. Delegate to the State Society meeting in Hutchinson, Dr. M. F. Jarrett.

There being no further business, the meeting was adjourned.

J. C. LARDNER, Secretary.

WILSON COUNTY SOCIETY.

The Wilson County Medical Society met last evening in its regular quarterly meeting at the Wilson County Hospital. The Neodesha doctors gave a supper for the visiting doctors at 7:30. The supper was prepared and served by the hospital diet department and supervised by Miss Shipley, the matron. This was one of the best meetings ever held by the Society. After the regular routine of business, including the election of officers for the ensuing year, the evening was turned into an experience meeting.

Dr. E. C. Duncan headed the program with a very interesting talk on how they did it at the front. He spoke of the terrible conditions they had to work in and gave the methods of caring for some of the conditions the medical officers had to combat. He spoke mainly upon gas infection, burns and shock as treated by the army. In his talk he spoke frankly for better training of our men for service.

Dr. Reece of Buffalo, who was a captain under Major Duncan, also made a few remarks, which were followed by Dr. Henderson of Coyville, Kansas. Altogether there were five doctors present who had donned the khaki for Uncle Sam.

After the military part of the program, a number of interesting case reports were given.

The doctors present were: Drs. Young, Flack and Duncan from Fredonia; Drs. Reece and Preston of Buffalo; Drs. A. W. Fairchild and Mrs. Dr. Fairchild, of Fall River; Drs. McGuire, Randall, Sharpe, Moorhead and Smith of Neodesha, and Dr. Henderson of Coyville, Kansas.

The following officers were elected: President, Dr. B. P. Smith, Neodesha; vice-president, Dr. A. W. Fairchild, Fall River, Kan.; secretary-treasurer, Dr. E. C. Duncan.

The next meeting will be held in Fredonia in the spring.

SHAWNEE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Shawnee County Medical Society was held January 5 at 8 p.m. at the Elks Club.

There was no set program and the meeting was opened for discussion of general subjects.

The Society endorsed the action taken in presenting to the Kansas Legislature a bill providing for the committal of drug addicts to the State Hospital for treatment.

The next meeting will be held Monday evening, February 2, at Stormont Hos-

pital. The evening will be largely devoted to clinical cases. Visiting doctors are invited to attend.

E. G. BROWN, Secretary.

SEDGWICK COUNTY SOCIETY.

At the meeting of the Sedgwick County Society held December 16 the following officers were elected for the ensuing year: Dr. L. A. Sutter, president; Dr. C. E. Ross, vice president; Dr. C. E. Caswell, secretary; Dr. A. E. Gardner, treasurer; Dr. A. L. Crittenden, censor. Delegates to the state meeting elected were: Dr. J. C. Brown and Dr. R. W. Hissem, with Drs. J. C. Dorsey and W. P. Callahan, alternates.

THE CENTRAL KANSAS MEDICAL SOCIETY.

The last regular quarterly meeting of the Central Kansas Medical Society was held in the Library building at Russell, December 17, 1919. Dr. F. S. Hawes, president, called the meeting to order.

The following members were present: Dr. W. J. Scott, Ellsworth; Drs. J. B. Carter and Leo V. Turgeon, Wilson; Dr. C. D. Blake, Hays; Drs. Stewart, Cramm, Hawes and Koerber of Russell.

The program prepared was as follows: "Diseases of the Gall Bladder," Dr. Carl Cramm, Russell.

"Influenza and Its Treatment," Dr. R. A. Stewart, Russell.

"Social Diseases and Hygiene," Dr. W. J. Scott, Ellsworth.

"Ventral Hernias Postoperative and Their Treatment," Dr. B. A. Poorman, Kansas City, Mo.

This being the annual meeting, officers were elected for the coming year. The past year having been such a good year for attendance, due to the interesting programs arranged, the society decided to re-elect the same officers: Dr. F. S. Hawes, president; Dr. Leo V. Turgeon, secretary and treasurer.

The transfer card of Dr. Paul E. Koerber, of Russell, from the Sumner County Medical Society to the Central Kansas Society, was read and accepted.

The next meeting is to be held at Wilson, Kansas, the second Wednesday in March, 1920.

ELK COUNTY SOCIETY.

The Elk County Society met at Howard, Tuesday, January 6, at 2 p.m., for the purpose of election of officers, and to transact other business of importance. The following officers for 1920: President, Dr. R. C. Harner, Howard; vice-president, Dr.

E. A. Marrs, Moline; secretary-treasurer, Dr. Seth A. Brainard, Moline; state delegate, Dr. J. F. Costello, Howard.

Dr. W. H. Van Meer, Longton, was voted a member of the Society.

Those present: Dr. W. H. Van Meer, Longton; Dr. Seth A. Brainard, Moline; Drs. Costello, Hays, Harner and DePew, Howard.

The next meeting of the society will be in February at Moline, date to be given later.

F. L. DEPEW, Secretary.

DOUGLAS COUNTY SOCIETY.

At the regular January meeting of the Douglas County Medical Society the following officers were elected: Carl Phillips, president; C. E. Orelup, vice-president; J. R. Bechtel, secretary; E. M. Owen, treasurer; H. L. Chambers, delegate to the State Society.

J. R. BECHTEL, Sec'y.

LINN COUNTY MEDICAL SOCIETY MEETS.

The Linn County Medical Society met in Mound City, Wednesday, December 31, 1919, at the office of Dr. Wortman. The following members were present: Dr. H. L. Clarke, LaCygne; Dr. H. H. Barret, Parker; Dr. G. L. Porter, Centerville; Dr. J. T. Kennedy, Blue Mound; Drs. D. E. Green and J. R. Shumway, Pleasanton; Dr. F. E. O'Neil, Prescott; Dr. J. G. Wortman, Mound City.

The society reorganized by the election of Dr. Clarke, president; Dr. Wortman, vice-president, and Dr. Kennedy, secretary-treasurer. Drs. Green and Wortman were chosen censors.

The members discussed general medical topics, especially those pertaining to the health of Linn County. They adjourned to meet in January.

HARVEY COUNTY SOCIETY.

The Harvey County Medical Society met on December 1 at the office of Dr. J. W. Graybill, at Newton, Kansas. The supper preceded the meeting, at the Auditorium Restaurant. The doctors present were: J. W. Graybill, F. I. Acheson, Max Miller, L. C. Axtell, J. T. Axtell, W. E. Regier, John L. Grove, H. M. Glover, M. C. Martin, J. A. Haake, R. S. Haury and Frank L. Abbey.

Dr. F. I. Acheson was elected to membership. Dr. Lucena C. Axtell read a paper on "Chorea" and Dr. J. W. Graybill read one on "Industrial Morbidity." A general discussion followed.

The officers elected for the ensuing year were: Dr. J. W. Graybill, president; H. M. Glover, vice-president; Frank L. Abbey, secretary-treasurer; M. C. Martin, censor; John L. Grove, delegate to the State Society.

Dr. Gaston Boyd, the oldest physician in point of service in Harvey County and one of the oldest residents of Newton, Kansas, died on November 21. Dr. Boyd came to Newton in 1871 and lived and practiced medicine here almost ever since that time, except about two years that he lived in Denver, Colorado. He was a pioneer, not only in medicine but in all that causes to make up a good citizen of any community. He served as mayor of the town and was highly esteemed by all who knew him.

The Harvey County Medical Society met at the office of Dr. A. E. Smolt in Newton, Kansas, after dining together. Thirteen physicians were present. The annual report showed a membership of twenty-seven, two being from Butler County, where there is no Medical Society. Dr. C. E. Boudreau, also of Butler County, was voted into membership. Dr. Tuttle, state epidemiologist, gave a very interesting lecture on "Influenza," touching incidentally upon the need for more investigation and study of the communicable disease. Annual dues were again fixed at \$9 a year for members resident in Newton and \$4 for members outside of Newton, the difference being used toward providing the suppers at the monthly meetings of the Society.

FRANK L. ABBEY, Secretary.

BARTON COUNTY SOCIETY.

At the last meeting of the Barton County Society the following officers were elected for the year 1920: Dr. T. J. Brown, Hoisington, president; Dr. Button, Great Bend, vice-president; Dr. B. S. Pennington, Hoisington, secretary and treasurer; Dr. H. C. Embry, Hoisington, delegate to the State Society meeting, with Dr. M. F. Russell, Great Bend, as alternate. It was decided to appoint one member at each meeting to write up notes of the meeting for publication in the Journal.

After the business much interest was taken in the discussion of "Dysmenorrhea" following which a light lunch was served.

RICE COUNTY MEDICAL SOCIETY.

The annual meeting of the Rice County Medical Society was held in the parlors

of the hospital at Lyons on December 18 at 8 o'clock p.m. with the following doctors present: Walker, M. Trueheart, Wallace, Currie, C. E. Fisher, Little, McCrea, McBride, Vermillion and Ross, and Miss Huffman, R.N., superintendent of the hospital.

A number of those present reported clinical cases of interest.

Recess was taken to the hospital dining room where a bounteous oyster dinner was served to the enjoyment of all present.

Dr. J. G. Walker gave a paper reporting clinical cases, one of erythema nodosum and one of pulmonary hemorrhages. This was followed by general discussion.

Election of officers for the coming year resulted as follows: President, Dr. J. G. Walker, Lyons; vice-president, Dr. M. Trueheart, Sterling; secretary-treasurer, Dr. H. R. Ross, Sterling; censor, three years, Dr. F. E. Wallace, Chase; delegate, two years, Dr. C. E. Fisher, Lyons.

The annual report of the treasurer showed a small balance on hand.

Fees and other matters of interest to the members were informally talked over after which the Society adjourned.

H. R. Ross, Secretary.

FINNEY COUNTY SOCIETY.

In answer to your letter of December 18, I am enclosing you report of completion of organization of the Finney County Medical Society and the treasurer has under today's date sent the remittance of our dues to the State Secretary, Dr. Hassig. We will wish our charter to be dated January 1, 1920, as per your suggestion.

The election of officers was held at the last meeting, December 30, 1919: President, Dr. W. J. Stilson; vice-president, Chas. Rewerts; secretary, R. M. Troup; treasurer, T. F. Blanke; board of censors, Dr. S. Bailey, Dr. Chas. Rewerts, Dr. J. B. Edwards.

Constitution adopted, and by-laws also. Meetings the last Tuesday of each month.

Under date of December 16 a supper program was held. Physicians from the surrounding counties were invited as guests. It is hoped to embrace the nearby counties in our Society and many have indicated that they wished to join us.

The list of members follows: Drs. W. J. Stilson, J. B. Edwards, S. Stevens, R. E. Gray, T. F. Blanke, S. Bailey, A. R. Knapp, Oliver Minor, Chas. Rewerts, G. F. Johnson (Lakin, Kan.), W. B. Williams, E. W. Ross, W. R. Mitchell, R. M. Troup. Applications are out among the neighbor-

ing men but have not been turned in so far. R. M. TROUP, M.D., Secretary.

R

Etcetera.

"An ounce or two of the juice of grape fruit sweetened to taste is a substitute for bicarbonate of soda in sour stomach.

"One of our correspondents says that experimental therapeutics is in a class with parlor farming.

"The United States Census Bureau for 1917 gave a total of 61,452 deaths from cancer as compared with 112,821 from pneumonia, 110,285 from tuberculosis, 115,337 from heart disease and 80,912 from kidney diseases. So it will be readily seen that cancer already ranks among the leading causes of death in this country.

"Dr. T. L. Higginbotham, Wichita, submits to the readers of the Journal the following question: "Would there be any diphtheria if there were no tonsils?"

"The means and methods used and suggested in the treatment of influenza are so at variance that each physician is a law unto himself in its care. There is no specific rule or practice recognized or binding. Conservation of lethal drugs is safe practice.

Dr. Jennie L. Eddy of Marysville is building a two story office building for herself.

"Dr. L. S. Fisher of Raymond has moved to Kansas City and is now a member of the Wyandotte County Society.

"Dr. W. H. Davis, formerly of Little River, is now located in St. Joseph, Mo.

"Cancer is apparently increasing. The recorded death rate shows about $2\frac{1}{2}$ per cent more cases every year. It has risen from 62.9 deaths per 100,000 of population in 1900 to 81.6 in 1917. Some of this increase is unquestionably due to an improvement in recording and gathering vital statistics and to better diagnosis, but it is generally believed that these factors do not alone account for the increase.

"Of the fifty-six physicians whose deaths appear in the A.M.A. Journal, December 27, eight had lived to or past eighty years of age, ten had lived to seventy years or more, eighteen were in the sixties, twelve were fifty or over, five were over forty and one under forty.

"T. H. Boughton, M.D., (Jr. A.M.A. Dec. 27) reports a case of anaphylactic death in an asthmatic patient who was given 1 minim of normal horse serum, intravenously, as a desensitizing dose.

"Dr. A. P. Beddard in a lecture on Chronic Arthritis before the Royal College of Physicians, London, stated that in 90 per cent of cases the primary area of infection would be found in the gums. The importance of the tonsils as sources of infection is exaggerated. Sometimes the tonsils are the site of a low grade toxemia, but are not a common cause of infection and it is seldom necessary to enucleate them on this account.

"The possibility of pulmonary syphilis should not be forgotten in cases of suspected tuberculosis in which repeated examinations of sputum fail to show tubercle bacilli.

"Dr. David Kaplan (N. Y. Med. Jour. Dec. 15) suggests that "the literature citing the spinal fluid findings associated with early dermal lues, gives the popular syphilide as the skin manifestation that shows a greater proportion of spinal fluid involvement than any other form of dermatological syphilis."

ENCOURAGING.—The number of deaths reported from all diseases in the A. E. F., approximating 2,121,369 men from September 1, 1917, to May 2, 1919, was 2½ per cent. If the same ratio had obtained during the Spanish-American war it would have been 5½ per cent and if during the Civil war 10.66 per cent. Only five deaths from small pox. In pneumonia the tables were slightly reversed, being approximately as 41 is to 6 is to 38.

ONE ON BILLY SUNDAY.—At a recent revival meeting Billy called on all in the congregation who wanted to go to Heaven to arise. All arose but two Jews. Billy called them forward and asked them why they did not want to go to Heaven.

"Vel," said one Hebrew, "Vat else can ve do? Our bizzness gone to hell."

"Women, unfortunately, are most susceptible to cancer. Between the ages of 35 and 43 three times as many women as men die of cancer, and between 45 and 50 twice as many die. They should, therefore, be especially educated to recognize the first signs of a benign growth and consult a physician at once. Persistent ulcerations, cracks and sores, warts, moles, or birthmarks which change in appearance, or grow larger, should be removed.

All forms of chronic irritation should be prevented.

"The following is quoted from a letter from the office of Surgeon General Rupert Blue:

"During the last twenty years it has been possible to reduce the general death rate in the United States from 17.6 to 14.2. This represents a truly enormous saving of life. Had the conditions of twenty years ago prevailed during the year just passed some 350,000 more persons would have died than actually did die. By dissemination of health educational matter the newspapers must be given credit for very materially helping in this substantial achievement."

"Dr. Seth A. Brainard, Wamego, Kan., has moved to Moline and has formed a partnership with Dr. E. A. Marrs. Dr. Brainard was in charge of Dr. Marrs' practice during the latter's absence of two years with the A. E. F. in France.

"The Abbott Laboratories of Chicago have been using half page space in this Journal. Their success warrants them in using a full page at this time. This evidence that the readers of this Journal are careful to patronize our advertisers is gratifying, and is a tribute to the policy which this Journal long since adopted, of publishing in its advertising pages only such medical products as have been accepted by the Council on Pharmacy and Chemistry.

The readers have come to know that this Journal protects them; and as a consequence they may unhesitatingly purchase the products which are advertised in this publication.

In answering the Abbott advertisement, each reader should use the coupon attached to the page advertisement, so this Journal will receive credit for the inquiry.

"Benzyl Benzoate, if we are to judge by the early clinical reports, promises to meet every indication for an antispasmodic. In some cases of asthma it relieves as quickly as epinephrine and in some cases where epinephrine failed relief was immediate with the administration of Benzyl Benzoate.

"The United States Supreme Court has recently decided that Congress has the power to declare that liquors containing more than one-half of 1 per cent of alcohol are intoxicating. It seems a very reasonable conclusion then that any future con-

gress may declare that only liquors containing more than 20 or thirty per cent of alcohol are intoxicating.

"Dr. Karl A. Menninger, Topeka, will be in Boston for the next five or six weeks, where he is conducting a clinical course in the department of psychiatry and neuropathology, as assistant to Dr. Southard in Harvard Medical School.

According to a recent report of the College of Surgeons there are now about four thousand fellows of this organization. A permanent home has been secured in Chicago. Each fellow of the college is required to pay \$500, or \$25 a year as dues until the amount of \$500 has been paid by him or until he has reached the age of sixty-five.

R

Pneumonia

G. D. Head (Minneapolis) and J. L. Seabloom (Red Oak, Iowa), Camp Wheeler, Macon, Ga. (Journal A. M. A., November 1, 1919), remark that some cases of acute disease may revive an old dormant disease, as happens sometimes with tuberculosis following pneumonia, and say that they are not aware that the attention of the profession has been called to the fact that syphilis may act to prolong or delay the reparative process in the lungs after a respiratory disease like pneumonia. They observe that the healing process after pneumonia in syphilitics does not always progress as in the normal individual, and when the usual methods of treatment fail specific treatment has been effective. Three cases illustrating the good effects of arsphenamin in clearing up the delayed resolution in patients suffering from chronic syphilis are reported. They advise its use in such cases of unresolved pneumonia.

R

Beef-Bone Splints

E. W. Ryerson, Chicago (Journal A. M. A., November 1, 1919), recommends the use of beef-bone splints and pegs in uniting fractures of the long bones. An autogenous peg, made from the patient's own tibia, of course, is the ideal material. But conditions are conceivable in which it would be unadvisable to remove a portion of the patient's own bone. In fresh fractures, however, in a reasonably young person heterogenous bone pegs may be used with safety and with the assurance of non-inhibition of bone growth. A Canadian surgeon has gone so far as to use beef-bone grafts in the spine, but Ryerson does

not altogether indorse or recommend this. He describes the technic of obtaining the splint from bones of slaughtered cattle and the method of their use.

R

Baths for Burns

Davis Forster, New Smyrna, Fla. (Journal A. M. A., November 1, 1919), gives an account of a boy who was severely burned by an explosion on a gasoline launch. His face, neck, arms, back, buttocks, thighs and abdomen were burned; in fact, the only uninjured parts by which he could be handled were one arm, his legs below the knees and his hair. Under the usual treatment of paraffin gauze he became more and more septic until the stench was overwhelming. On the fifth day, following a suggestion of boric acid fomentations, he was placed in a bathtub full of warm 2 per cent boric acid solution, the temperature being between 90° and 100° degrees F., for one hour, after which he voided sixteen ounces of urine. When he was taken from the bath the bleeding parts, particularly the buttocks, were treated with an ointment having a petroleum base, while the rest was treated with paraffin after drying. The results were so favorable that the next day he was kept in the bath for three hours, and large sloughs and dead skin were detached. The sloughing on the right side of the neck was so extensive that it was feared contracture would follow, but gradually the condition improved. The baths continued daily, changing from boric acid to physiologic salt solution. At the end of three weeks the patient was on his feet, and in four weeks was discharged "rough healed" with only the right ear sloughing.

R

Coronary Thrombosis

The possibility of delayed death in coronary thrombosis has been recently emphasized by Herrick in The Journal, and R. B. Acker, New Orleans (Journal A. M. A., November 29, 1919), reports a case in which a patient lived for thirteen days after the first onset of symptoms. An important feature is the intense abdominal pain that may be present. This has an important surgical bearing, as it may be accentuated over the appendix or gallbladder in which case an operation should be performed. Acker reproduces Herrick's classification; first, instantaneous death; second, death within a few minutes or hours; third, delayed death, and fourth, cases with mild symptoms such as slight

precordial pain due to obstruction in the smaller branches of the arteries. The case reported was of the third class. Postmortem showed a partially organized thrombus in the anterior descending ramus of the left coronary artery. The anemic area, except at the extreme tip of the ventricle, was confined to the inner one-half or two-thirds of the ventricular wall, a distribution Acker has not seen described before.

R

Calomel Inunctions

H. N. Cole and Sidney Littman, Cleveland (Journal A. M. A., November 8, 1919) have experimented with the effects of the substitution of calomel inunctions for syphilis instead of the mercurial blue ointment, which is very uncleanly, leads to discovery, and frequently sets up an irritation of the skin. The advantage of lack of salivation means lack of effect on the system. Brief notes are given of fifty-four patients treated intensively with calomel rubs, and the conclusions reached are as follows: "1. Calomel inunctions are almost totally inefficient against primary and secondary syphilis. 2. Calomel inunctions very rarely produce salivation of gingivitis. This means poor absorption of the mercury and explains this clinical inefficiency. 3. Calomel rubs occasionally produce a dermatitis. These results have led us to abandon calomel inunctions, and we would strongly advise against their further use in the treatment of syphilis."

R

Cerebrospinal Fluid

W. W. Herrick, New York, and A. M. Dannenberg, Philadelphia (Journal A. M. A., November 1, 1919), review the facts of the physiology of the cerebrospinal fluid, giving references to the literature, together with cerebrospinal fluid abnormalities in diseases, so far as they have been studied, especially in pneumonia, scarlet fever, mumps, influenza, gastro-enteritis and rabies. They report also their personal observations, as not yet altogether completed, and analyze the accompanying tables. They are not impressed at all with the dangers that have been charged to lumbar puncture methods and say in conclusion: "1. A review of the literature and a personal study of seventy-six cases not resulting in meningitis show beyond question that the cerebrospinal fluid often gives evidence in increased pressure, pleocytosis and heightened globulin content of a reaction on the part of the leptomeninges to

the infective agents or toxins of a large number of miscellaneous acute diseases, not ordinarily causing true meningitis. 2. These diseases are lobar and bronchopneumonia, influenza, tonsillitis, the exanthems, scarlet fever, measles, variola, herpes zoster, parotitis, typhoid fever, sepsis, arthritis, pleurisy, migraine, reaction to typhoid inoculation and others. 3. The cerebrospinal fluid shows variation from the normal in about one-third of the cases studied. 4. Most, but by no means all, of the patients with subarachnoid reaction have clinical meningismus (meningitis serosa—Dupre). On the other hand, many examples of meningismus are without pronounced changes in the cerebrospinal fluid. 5. The greatest caution should be used in making a diagnosis of meningitis or poliomyelitis from fever, meningismus and the changes in the cerebrospinal fluid mentioned. Cases with less than 100 cells should be viewed with skepticism, unless clinical, epidemiologic or other laboratory evidence is decisive."

R

A loving enemy is more dangerous than a hating enemy.

Occasions do not make a man but they show what he is.

It is as easy to close the eye of the mind as to close the eye of the body.

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THE JOURNAL of The Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, FEBRUARY, 1920

No. 2

Notes on the Diagnosis and Treatment of Syphilis

NELSE F. OCKERBLAD, B. S. M. D.

Chief of Genito-Urinary Clinic and Assistant Professor of
Genito-Urinary Surgery, University of Kansas School of
Medicine, Rosedale.
Read at the Annual Meeting of the Kansas Medical Society
held at Ottawa, Kansas, May 7 and 8, 1919.

Fully sixty per cent of the primary penile sores referred for treatment both at the Genito-Urinary Clinic at the University of Kansas School of Medicine at Rosedale and in private practice have either been cauterized or had antiseptics applied so that our most valuable means of early diagnosis—the demonstration of the living spirochete with the darkfield stage—is obscured, if not actually annulled.

It should be generally known among medical men and firmly established that a penile lesion, be it ever so slight, should not be passed over without every effort made to exclude syphilis. Unfortunately this is not the case and there are still medical men who believe they can always tell a "hard chancre" from a "soft chancre" and will still continue to cauterize the "soft chancre." When you have seen a large number of primary penile lesions you will be sure of only one thing by inspection alone and that is that every such lesion may be syphilis regardless of its appearance, whether it be a hard sore or a soft one. But, you reason, the incubation period gives you the correct clue, if it occurs three days after exposure it must be a chancroid; if it occurs as late as three weeks it must be a syphilitic sore.

The latter presumption is more often right than the former, and this confusion has caused many good men to say that

there is no such lesion as a chancroid. But these observers have neglected to consider that these two infections may co-exist in the same lesion and that no spirochetes can be demonstrated in the lesion because of the longer incubation period. Furthermore, the bacillus Ducre is a pyogenic organism and the spirochete is not, and if we have a lesion which is covered with pus and secretion from a suppurative condition the difficulties in the way of a darkfield demonstration of the spirochetes are multiplied.

On the other hand, with a clean penile lesion free from pus which develops two to five weeks after exposure the demonstration of the spirochete in untreated lesions is a comparatively simple procedure.

The problem of what to do with sores that have been cauterized or otherwise treated must be solved. There are two ways of getting around this difficulty; the first is to carefully remove any crust that has been formed and wipe the lesion off with a dry piece of gauze until it is clean, then apply a few drops of ordinary xylol and rub the lesion again with dry gauze—this brings out rapidly the serum from the deeper layers and with it the spirochetes. Allow this serum to settle out until it becomes clear, then prepare a slide in the usual manner. As is often the case, the spirochete cannot be found after this procedure on the cauterized lesions. Now if you send the patient away with instructions to put nothing on the sore but to return in three days for more diagnostic efforts, he probably will fall into the hands of a quack or someone who will give him

some local treatment. This brings us to the second method of solving this problem, and that is—after you have completed the above procedure and found no spirochetes, you cover the lesion with a simple unmediated ointment, ordinary white vaseline, and give the patient a prescription for this to be applied three times a day for three days and to return at the end of that time. When one recalls that the spirochete is an anaerobic organism and that the unmediated greasy covering securely seals the air from the lesion, the logic of this procedure is readily recognized. This can be repeated as many times as seems necessary to find the spirochetes. A negative spirochete search is of about the same value as a negative T. B. search. The demonstration of the living spirochete is the infallible proof of syphilis.

Another method sometimes made use of is to plunge a coarse hypodermic needle into an inguinal gland breaking or crushing the gland until some of the gland substance can be aspirated and examined. Spirochetes are often found in this way.

Still another method has been suggested and is a workable plan, and that is to apply to a doubtful rash a bit of Spanish fly blister, then aspirate the resulting bleb and search with the darkfield apparatus. When in doubt, treat the patient as a syphilitic.

In this connection you may be thinking, "Where does the well-known Wassermann reaction come in?" As is well known the Wassermann reaction is rarely positive in less than 10 to 14 days after the discovery of the lesion. Which, being interpreted means that the Wassermann reaction begins to be positive as soon as the septicemia begins and continues to increase, 1 plus, 2 plus, 3 plus, 4 plus, as the septicemia increases.

For this reason many a syphilitic who presented himself for treatment with a primary sore and had a negative Wassermann reaction was told he did not have syphilis. The reason for early and accurate diagnosis is the fact that we know today that much the best results in the

treatment of the disease are obtained when treatment is begun in the latent period before septicemia is well developed.

The older syphiliographers did not know of the existence of the spirochete, much less how to make a diagnosis by finding them; he had no Wassermann to confuse him, but he did make use of a lot of the finer clinical signs that are largely lost to us who lean upon the laboratory.

The appearance of a syphilitic rash is so thoroughly characteristic that it should be almost diagnostic.

The character of the inguinal or other glandular chains on palpation should always put one on his guard if not make the diagnosis.

Besides the controversy over the origin of syphilis and the introduction of mercury in its treatment in 1525 we have witnessed in our generation the greatest advance in the diagnosis and treatment of this disease that has ever been made.

The first of this series of four epoch-making events was the discovery of the spirochete pallida as the causative organism by Fritz Schaudinn in April, 1905. Schaudinn's modest announcement before the Berlin Medical Society on May 17, 1905, was very quietly received, but this was not strange since in the 25 years prior to that time there had been 125 announcements of the discovery of a causative organism for syphilis. Curiously enough, Schaudinn, like Pasteur, was not a medical man.

Out of this announcement grew the second great advance—namely, the inoculation of animals with the spirochete pallida, thus producing and reproducing the lesions so well and so long known in man and proving beyond a doubt that Schaudinn was right.

The third and fourth brilliant researches came in the same year, 1910, when Wassermann announced his complement-fixation test as a means of diagnosis and Paul Erlich gave out his arsenical compounds under the name of Salvarsan or 606 which has become the capsheaf of these brilliant

discoveries that have taken place right in our own time.

While no accurate figures are available, our clinical experience and the estimates of shrewd clinicians leads us to make the statement that in males 10 per cent to 15 per cent of the infections are innocently acquired, the other 85 per cent to 90 per cent is acquired as a direct result of the fact that the male in the matter of sex is the aggressor and the general run of mankind make but little effort to control the sex appetite.

In women the percentage of innocently acquired infection arises much higher for reasons that are perfectly obvious. Probably over 50 per cent of the infections in women are innocently acquired.

The problem that confronts the physician, when a man of mature years, single and apparently in his right mind, presents himself for treatment with a primary lesion, is comparatively simple of solution. This patient admits an exposure to infection and is promptly told of the seriousness of his disease and a course of treatment is laid out for him.

Suppose a youth of some 14 or 15 years presents himself for treatment with a primary sore in which spirochetes are found. Within the past year several such cases have come to my attention. This youth cannot be impressed with the seriousness of his disease. In one instance the case was reported to the father, who promptly said nothing of the kind could happen to his boy and took him to another physician who "cured" him with a few local applications. A case of a student at the State University who presented himself for treatment with a primary sore three weeks after a night of debauch spent in Kansas City, was persuaded that his father would be his best friend and that he should be told of his condition. The young man made a clean breast of it and the "old man" disowned and all but kicked him out of the house. The young man is still at the University earning his own way and is still under treatment.

Another case in point: A young man of 26 years, a machinist, presents himself for treatment with a penile lesion. Upon examination, he is found to have a well-developed secondary rash. Search of the sore proved negative for spirochetes but the Wassermann was four plus. Seven weeks prior to the time he was first seen he went out for a "time" with some "friends" and was exposed with a prostitute. Two weeks from the time of his exposure he married a fine, healthy girl of twenty years. One week after his marriage he noticed a small sore on his penis and had no further intercourse with his wife. When it was insisted upon that she be brought in for examination, he finally brought his wife over and, as was suspected, a primary sore was found on the fourchette in which spirochetes were found. This girl was not informed of the nature of the disease which she had innocently acquired, for she had no complaints whatever and it was only with the greatest tact that she was persuaded to present herself for examination. She now has had four Salvarsan treatments and a number of mercury treatments and it would seem as if we could continue treatments without arousing her suspicions.

Another case, that of the X family: A man, his wife, and two children. The wife was examined by a nose and throat man who suspected syphilis and a Wassermann was done which was 3 plus, and she was told all the harrowing details and possibilities of the disease from which she was suffering, also told that this probably congenital. After making the rounds of several physicians, they finally presented themselves at the venereal clinic at Rosedale. They were both on the verge of distraction. The man had lost his job because of the turmoil in his home. The man admitted illicit intercourse some eight months before and a primary lesion. He had a purulent discharge from the penis in which gonococci were found. His Wasserman was four plus. At this point some complicating evidence appears. The youngest child is two years of age; both

children have four plus Wassermans. It is evident that this is a family of syphilitics, but is it a congenital infection thru the mother or is it a regular infection thru the father, and if so, how did the children become infected? The solution would seem to be that the mother is a congenital syphilitic and transmitted the disease to her offspring and the father acquired a new infection.

This family started on treatments and then were lost sight of for a time, but it was learned later that the woman had become temporarily insane and attempted suicide by severing the arteries in her wrists. We have managed to keep the family together. They are now living in Kansas City and are taking regular treatments.

One could cite case after case where the physician must exercise both shrewdness and judgment in the handling of these patients. If the motto of the social worker, "Keep the family together at all costs" is adhered to one will not go far astray. If a man and his wife are both syphilitics they may as well remain together, for if separated, they will infect two or more innocent parties. Syphilis is not the terrible scourge it once was, tho terrible enough to be sure. Osler ranks it third among the killing diseases. Neglected syphilis is the menace of civilization today, there is no corner of the world where this disease is not present. Dr. P. C. Jeans of St. Louis, of the department of pediatrics of Washington University, is authority for the following statement of fact: "From 10 per cent to 20 per cent of the adult males and about 10 per cent of the married women are syphilitic, and a minimum of 10 per cent of marriage involves a syphilitic individual. Seventy-five per cent of all offspring in a syphilitic family are infected. In a syphilitic family 30 per cent of the pregnancies terminate in death at or before term, a waste three times greater than is found in non-syphilitic families. Thirty per cent of all the living births in a syphilitic family die in infancy, as compared to a normal rate of 15 per cent in the same class. Probably 25

per cent to 30 per cent of clinical syphilitic infants die as a result of syphilis, but 17 per cent of all pregnancies in syphilitic families result in living non-syphilitic children, which survive the period of infancy. About 5 per cent of our infant population is syphilitic. According to the St. Louis vital statistics $3\frac{1}{2}$ per cent of all infant deaths are attributed to lues."

From an analysis of the statistics of the Registrar General, Osler estimated that, including still births and deaths of infants, the number of actual deaths from syphilis among all ages was of such magnitude as to place syphilis an easy first among the infections as a cause of death, instead of the tenth place it had been given in the report. Downing in a similar estimate from the vital statistics of Massachusetts shows that syphilis falls little behind tuberculosis as a cause of death.

Since there is no reasonable hope of our preventing syphilis, our greatest effort must be directed toward treating the disease early and well, directing the treatment toward first the adult carrier and next in importance, the syphilitic prospective mother.

Larkin and Cornwell are authority for the statement that 20 per cent of all syphilitics have nervous involvements, and they quote Fordyce as saying that 30 to 40 per cent of all syphilitics have foci in the central nervous system. Colonel Vedder has shown that 16 per cent of the white enlisted personnel and 37 per cent of the inmates of the soldiers' homes are syphilitic. Assuming then, that 16 per cent of the recruits suffer from undetected syphilis, we can foresee an army of 320,000 syphilitics among every 2,000,000 men inducted into the service.

TREATMENT

There is only one treatment worthy of consideration today, and that is intensive combined Salvarson and mercury treatment. Both these drugs are spirocheticides and their use is founded upon scientific fact. Potassium iodide may heal syphilitic lesions but it is never a spirocheticide and therefore, not curative. Po-

tassium iodide is of value where there are gross lesions to be healed; in primary syphilis is of no value.

There are several systems of treatment: the alternate intensive, and the continuous intensive; the large dose and the small dose. Each has its adherents. At the Medical School at Rosedale we are trying out both the alternate intensive and the continuous intensive. In the alternate intensive system as we use it, the patient is given six injections of 0.4 gm. arsphenamine intravenously at one week intervals. At five day intervals they are given intramuscular injections of insoluble mercury preparation, or twice weekly they are given, intravenously, mercuralized serum which consists of 1-15 gr. of bichloride of mercury to each 1 c. c. of human serum. Others are put on inunctions, that is, they rub mercury on themselves every night for thirty nights. This treatment is kept up for six weeks, then all treatment is stopped for six weeks. At the end of this rest period the Wassermann is taken and treatment continued thru another six weeks' course. Some of these we plan to keep for two years. Others we plan to dismiss at the end of one year. Still others will stop treatment without permission. We plan to keep check on these patients with Wassermann tests every three months for as long a period as we can get them to report back, so that ten or twenty years from now a study of these cases will mean a great deal.

The continuous intensive treatment is one that is well adapted to private practice and consists of giving doses of about 0.3 to 0.4 gm. arsphenamine intravenously at three to four day interval until ten or twenty doses are given. The same scheme of mercury administration will be carried out in the alternate intensive plan. These patients are continued on the mercury treatment until the end of a six month period when they are dismissed for six weeks to return for a Wassermann test. If negative, they are discharged to return in six months for Wassermann, and we plan to check them every six months as

long as possible. There may be cases where mercury by mouth is indicated but it is not nearly so effective as by either inunction or injection.

Every adult persons has veins large enough to have arsphenamine administered if one has the required skill. Intramuscular injections are not indicated except in unusual cases; the exception to this may be said to be in children between the time the fontanelle is closed and 7 or 8 years. In about one-half of these juvenile cases the intravenous administration of arsphenamine is extremely difficult, in the other half it is comparatively easy. In children with open anterior fontanelle. Salvarson can easily be administered in the longitudinal sinuses thru the fontanelle. Children tolerate Salvarsan well and the results are most remarkable. We have given twenty-five doses by this method with no untoward results. They will tolerate well one-tenth the adult dose.

TREATMENT OF THE NERVOUS CASES

The treatment of the neuro-syphilitic involves nothing new except the various methods which are used to get the drug in contact with the spirochetes. We are using two principle methods, both of which are of the continuous intensive type. One consists of giving the patient 0.4 gm. arsphenamine at three to four day intervals with the preparation of the Swift-Ellis serum, intra-spinally at intervals of one week.

The other consists of giving arsphenamine in 0.3 gm. doses every three to four days until ten or twenty doses are given, then each time about twenty minutes after the injection, a spinal puncture is done and about 5 c. c. of spinal fluid is drawn off. Thus far the results in our clinic have been quite similar, using these two lines of treatment.

Reactions following arsphenamine occur in our clinic in less than 5 per cent of cases and these are usually mild.

One point that should not be ignored in the administration of arsenical compounds is the appearance of a slight rash, or ear-

lier, the reddening of the wrists and forearm. Do not disregard this warning, for serious results will follow.

Since the opening of our Genito-Urinary Clinic at the Kansas School of Medicine, Rosedale, we have treated over five hundred syphilitics; with what results we are not yet ready to state, since only a year has elapsed since the first cases were observed.

When is syphilis cured? If we could answer this question positively with the backing of clinical and scientific data, we could be said to have achieved another great advance in the management of this disease.

Negative clinical results are unreliable and of doubtful value. The laboratory offers us a more stable basis of judgment if made use of intelligently. Post-mortem examination with special reference to serial section for the purpose of discovering the spirochete in tissue has been highly developed by Warthin of Michigan in his painstaking researches. Warthin has shown us thru his great work that cured syphilis is analagous to cured tuberculosis. He could not say definitely, however, that the spirochete thus found were capable of producing disease.

Fournier, who knew more about syphilis than any syphilographer of his day, in his lecture on "Marriage and Syphilis" published in 1881, laid down five requirements to be fulfilled by the syphilitic before he could marry:

1. Absence of existing accidents (i. e. no clinical evidence of the disease.)
2. Advanced age of the diathesis (3 or 4 years) Thompson gives three years of negative findings as the minimum time in which a cure can be affirmed.
3. A certain period of absolute immunity consecutive to the last specific manifestation (18 months to 2 years.)
4. Non-threatening character of the disease (this point is not well taken as has been proven by our modern laboratory findings.)
5. Sufficient specific treatment (3 to 4 years of Hg. and K. I. Fournier.) Even

from our advanced modern viewpoint we cannot change to any great degree any of the five rules laid down, except perhaps, the length of specific treatment. Williams of Toronto General Hospital says that from November 1915 to September 1918, eight-hundred-ninety-nine patients have been treated for syphilis at the Toronto General Hospital Special Treatment Clinic. These patients were divided as follows: 90 primary; 170 secondary; 639 tertiary or latent.

After two years of intensive treatment he has been able to say, by following patients clinically and with laboratory tests: that of the primary cases, 82 per cent have been cured; secondary cases, 67 per cent have been cured; tertiary cases, 43 per cent have been cured. Reinfection has always been cited as a proof of cure, but it is not re-infection unless White's requirements (White, British M. J. 1917-11-509) for proof of re-infection are fulfilled, which are:

1. A demonstration of spirochetes in the chancre or syphilitic lesion or a positive Wassermann in the first attack, and,
2. In a second attack, the spirochetes being found from the new chancre which appeared at a different site from the first chancre, and the blood at the same time giving a negative Wassermann reaction.

Two decades cover the period of real scientific knowledge of this important disease. Our modern treatment dates only to the year 1910. After we have observed treated cases for a period of from twenty to thirty years, we may be able to make some positive statement as regards a cure.

R
Theory and Practice of Non-Specific Therapy

W. A. MYERS, M. D.

Assistant Professor of Internal Medicine, Medical Department, Kansas University, Rosedale, Kansas.

Read at the Annual Meeting of the Kansas Medical Society held at Ottawa, Kansas, May 7 and 8, 1919.

Theory now holds that there are two processes by which man or animals may combat disease. The older, more widely accepted, and best proven theory, is based on the possibility of specific antibodies be-

ing formed for the cure of every infectious disease. We will not discuss here the already accepted therapeutic value of certain specific sera, notably those of Diphteria, Tetanus, Meningococcus, and type 1. Pneumococcus. We want to urge the laboratory and clinical workers to continue their persistent, painstaking research to find for every disease, as certain a cure as in the maladies mentioned above. However, since the Science of Etiology has so far outstripped our knowledge of specific vaccine treatment, it has been considered timely to present here a brief study of the newer hypothesis in therapeutics, that of non-specific curative forces in the diseased body.

This theory has recently been revived in some of our most prominent medical universities and clinics, with the hope of adding something to the treatment of the long list of infectious diseases, where specific vaccine and serum therapy have failed. The theory is based on the following hypotheses:

1. The etiology of all infectious diseases is fundamentally the same and is due to the action of toxines—largely bacterial protein—on our body tissues. (1).

2. There are throughout the body, known protein splitting enzymes, non-specific in character and action, and therefore capable of attacking any invading protein toxin, whether bacteria, animal or vegetable. (2).

3. These non-specific protein enzymes may be activated somewhat, by the injection intravenously of various foreign protein in proper dosage. (3).

Up to date, the protein most frequently used is a typhoid vaccine, though experimental work would indicate that other proteins could be substituted with practically the same results, experimental work having been done by using milk casein, peptone, various bacterial proteins, egg-white, etc., all of these activating in almost identical degree, these non-specific curative forces, if only the protein is injected intravenously. In fact, one of our most respected, conservative, and widely

known medical writers (3) ventures the challenge that there is almost no good result obtained with autogenous vaccines in any disease that may not be duplicated on a basis of non-specific therapy.

It was stated above that the theory of non-specific therapy rests on the hypothesis that the causes of all infectious diseases are fundamentally identical. That is, one is sick because some poison is destroying his normal life processes. Now there is *a priori* evidence clinically, that there is some common cause of disease since there are common effects produced by infectious disease processes. The most common condition in all disease is a disturbance of the temperature equilibrium—or fever—though this is commonly associated with other variable changes in pulse, respiration, blood picture, and blood and urine chemistry. It may not matter that the fever of typhoid differs from the fever of malaria on the clinical chart, the fact still remains that the fever is a common condition in all acute infectious diseases, and logically there may be some common etiology.

The principal cause of pathological processes is the partially split proteins of the invading organism and those proteins are practically identical, whether from tubercle bacilli, typhoid bacilli, pneumococcus or spirochetes. The difference in their disease producing virulence differs, where it does differ, in the bacteria's own enzymes and protein molecule, which furnish the bacteria the power of digesting or otherwise destroying the host's body tissues. Vaughn (1) has argued that all proteins, regardless of their origin, have nuclear units which are identical, and that this basic unit is toxic. He calls this the "crude soluble protein toxin," and Whipple (4) has attempted to identify this as a toxic proteose. It is possible to take this protein product, present in any bacteria, and by varying the dosage, not only to produce disease at will, but even control the fever experimentally, causing a fever chart identical to a typhoid, a pneumonia or a malaria. It has been proven by

Cooke and Whipple (5), that our own body tissue proteins may act as a poison, as when sterile abscesses are formed by the injection of chemicals. Thus there is a great deal of evidence to prove that disease processes are due to the absorption of poisonous proteins, bacterial or animal. This toxin by chemical tests gives evidence of being a proteose.

The production of these toxins from proteins is inseparably bound up with the study of our body ferments, since proteins intact or proteins completely digested by ferments as a rule do not have these toxins. These ferments may be divided roughly into (1) those in the gastro-intestinal tract or the enteric ferments, and (2) those in the blood stream and body cells or the parenteric ferments. Each of these may further be divided into lypolytic, amylolytic, and proteolytic ferments. We will confine ourselves here to the study of the parenteric proteolytic ferments or proteases in their relation to the production and treatment of disease, using the enteric ferments only for illustration.

The most familiar illustration of the action of a proteolytic ferment is the digestion of the egg-white in the stomach or a test tube. To illustrate this process, one may put into a test tube some boiled egg white in a 0.03N. hydrochloric acid solution in the presence of pepsin and the egg-white will soon begin to change, not only its physical qualities, but, chemically will pass from insoluble non-toxic albumen to acid albumen, primary and secondary proteoses, and peptone, the last named ones being toxic, finally, however, being split into a soluble variety of amino-acids which as a rule is non-toxic. We are interested here in the process of breaking down of proteins and the poisons produced from that process. It may be illustrated by the fact that a gram ($\frac{1}{4}$ teaspoonful) of milk casein produces enough of this soluble toxic poison to kill 800 guinea pigs. (1). The ferment producing this breaking down is called protease (pepsin, trypsin, erepsin) and is present in some form in both the stomach and intestines. Now if

we add to the test tube mentioned above, some homologous blood serum, the process of digestion ceases, indicating that our blood serum contains an anti-ferment or a power of preventing digestion. This anti-ferment of the blood serum is chloroform-soluble, and is probably a lipoid. It not only protects the gastro-intestinal walls from being digested away, but may be responsible for preventing the autolytic ferments of our body from actually digesting our own proteins and destroying our life. We know that every living cell has ferments, destructive as well as reconstructive, and when these ferments are in the blood stream or in any tissue, as the muscles or brain, we term them parenteric ferments. The titer of both the ferments and the antiferments of the blood may be determined in the laboratory though the titer is very much less than in the gastro-intestinal secretions. These parenteral ferments and their antagonists, the anti-ferments, have apparently a wonderfully well-regulated balance in the body in perfect health, (6) but lose that equilibrium, in certain conditions. It has been shown for example that the action of potassium iodide in syphilis, acts by reducing the antiferment titer allowing the gumma to be digested by the parenteric ferments. Whether this fluctuation is through the endocrine glands, especially the thyroid, is not clear. This ferment-anti ferment balance is effected by absorption of food from the intestinal tract as shown by Davis and Peterson. (7). It would not seem strange that this equilibrium could be affected by disease processes, either natural or artificial.

Disease may be due to the destruction of this equilibrium, as it has been shown that the presence of a foreign protein in the body, say the invading organisms of typhoid, reduces the antiferment in the blood and the parenteric ferments destroy not only the protein of the invading organisms but even the body albumen. The striking thing about this is that the proteose let loose by the injection of Witte's peptone or purified egg albuminose will

digest, not only these albumens, but will digest also bacteria and their proteins that may be in the body. The injection of typhoid bacilli protein intravenously, frees a ferment that may digest alike the typhoid bacilli proteins or may result in the complete destruction of invading streptococci as in arthritis. This is the theory of non-specific therapy, the "febrile therapy" of the Germans because of the high fever produced, or "shock" therapy of American writers because of the evidence of shock in the reaction.

It is at least novel to study some of our more familiar diseases in the light of this theory. If we inject one hundred to one thousand million dead typhoid bacilli intravenously in man, certain phenomena develop. There is an incubation period usually of a few minutes to a few hours, when there occurs, beside a fall in blood pressure and reduced coagulability of the blood, a severe chill, tachycardia, hyperpyrexia, followed by apyrexia or subnormal temperature, a leucopenia, followed by leucocytosis of from 20,000 to 50,000 and generalized aching similar in so many ways to the recent pandemic of so-called influenza, where chill, fever, leucopenia, frequent hemorrhages, and a general malaise were present. These induced chills by a foreign protein injection, reminds one very greatly of a typical ague chill, and indeed malaria has been explained on the basis of the absorption of foreign protein of the dead parental plasmodia at the birth of the succeeding generation. (8). It is noteworthy that Vaughn has been able to reproduce the fever chart of typhoid by carefully graduated dosage of a variety of foreign protein. (1). Fever is protective following the stimulation of foreign protein, and is so in direct proportion to the height of the fever. This may mean, however, that the fever is only an indication of the amount of parenteric ferment liberated to destroy the invading bacteria and thus terminate the disease process.

Now, what can we hope from this theory in application in the treatment of diseases?

Here we have a fairly well substantiated theory that (1) all infectious disease is due to poisonous proteins, (2) that in the body we have certain amounts of non-specific proteolytic ferments, and (3) the intravenous injection of foreign protein in certain cases will stimulate these ferments to combat disease.

This is an old adage: "*Similia similibus curantur*," which may be in some way applicable here if we work on the hypothesis that at base, diseases are caused by identical protein toxins, and may be cured by protein toxins, the nucleus of protein molecules being at once the cause and acting through the ferments becoming the cure of disease. One may be led to expect some such relation of cause and result from certain clinical and experimental work. Pasteur (9), for example, noted years ago that there was a certain protective immunity against anthrax by the injection of attenuated bacilli of chicken cholera. Oddly enough, the principle has been neglected by the profession for over a quarter of a century. Schmidt has called attention to the resistance to a "variety of common infections" following any form of vaccine. Transient immunity against *B. Coli* infections equal to the immunity of Colon vaccines has been produced by the use of peptone and egg albumen. There are on record cases of arthritis completely healed after tonsillar abscesses, or pneumonia with marked pyrexia. A case under our observation suffered from bronchial asthma but remained free for eight years following a severe case of erysipelas. Many physicians who read this will recall cases illustrating this principle of non-specific therapy.

In 1893, Rumpf showed that he could secured as good results in the treatment of typhoid fever with *B. Pyoscyaneous* vaccine as could Fränkel, his chief, secure with typhoid vaccine. Ichiwara first treated typhoid fever with typhoid vaccine intravenously (200-300,000,000..) He found approximately 20 per cent ended by crisis, 20 per cent by rapid lysis, 20 per cent by a retarded lysis, and 40 per cent were un-

changed in their course except for the rigor and pyrexia following each treatment. Such may be urged is a specific reaction, but he further found equally good results in treating para-typhoid fever with typhoid vaccines, and Krause found good results in treating typhoid fever with R. Coli or B. Prodigiosus vaccine, and others have found the same with deutoer-albumose, Pyoscyaneous bacillus vaccine, egg and milk albumen, if only they were given intravenously. In the treatment of typhoid there are certain contra indications, notably the tendency to hemorrhage, since this method reduces the coagulability of the blood and the only deaths noted in typhoid responsible in any way to the treatment were associated with hemorrhage. In California University, Gay (¹⁰) has treated 98 cases of typhoid, of these reporting that 33 aborted, 32 were benefited, and 33 were not affected. Sensitized vaccine was used.

Arthritis has likewise been treated by this method with striking results. Miller (³) reported treatment of arthritis in Cook County Hospital by foreign protein injection. He treated acute, sub-acute, and chronic cases, amounting in all to over 200 cases. He had equally good results in using chicken serum, proteose, or typhoid vaccine. Of the 93 cases treated with B. Typhosis vaccine, 80 were either relieved or greatly benefitted by from one to four injections, at daily intervals, six showed only moderate improvement, and seven not benefitted even by repeated treatments. He reports 33 acute arthritis cases resistant to salicylate treatment, all except four responding to this vaccine intravenously. In chronic cases, both Miller and Thomas (¹¹) working separately report good though not so striking results. Cowie and Calhoun (⁸), in the University of Michigan, beside doing careful work on the blood picture of these conditions report some cases with good results in chronic arthritis amenable to no other line of therapy. They as a rule use 500 to 1000 million typhoid vaccines intravenously. Numbers of workers have verified the

successful treatments of arthritis with typhoid vaccine intravenously, and are convinced that rapid and frequently complete relief may be secured in a high percentage of cases by the bold use of well-regulated dosage of foreign protein intravenously.

Recent literature is constantly adding to the list of diseases where this type of treatment may be used with some hope of results. Roberts and Cary (¹²) report 200 cases of influenza-pneumonia treated with mixed vaccine intravenously, producing daily chills, claiming a mortality of only 9.5 per cent as opposed to 31.2 per cent in a controlled series of 85 cases treated expectantly. They believe with Herman (¹³) that the intravenous injection of foreign proteins stimulates, not only non-specific ferment, but also antibodies when the previously invading protein (or diseased process), has failed to cause this liberation. They conclude that this line of therapy in influenza-pneumonia has a very positive therapeutic value, and are inclined to believe that the procedure will come to be accepted as useful in a wide variety of infectious diseases. It has not proven of service so far as we have found in erysipelas or the exanthemata, though there are good results reported in the treatment of puerperal sepsis, typhus, iritis, trachoma, psoriasis, and chronic gonorheal lesions.

Up to date we have failed to find experimental or clinical evidence of this method of therapy being of service in typically anaphylactic conditions of urticaria, hay fever and bronchial asthma. Auld (¹⁴) has used peptone in the treatment of bronchial asthma with good results, but he has cautiously avoided a rise in temperature thinking this quite inadvisable. He has, therefore, in no way utilized the theory of febrile or foreign protein therapy as we know it in America. The possibility of this method of treatment being of value in even this class of highly anaphylactic disease, was brought to our attention by the case mentioned above, a severe case of

asthma apparently cured by an attack of erysipelas. These asthma and hay fever cases are conceivably due as much to the ethmoiditis, polypi, and sinusitis present, and the resultant absorption of some protein as to the specific pollen. In this connection, it is interesting to know that Frank and Strouse (15) report that treatment of hay fever gave equally good results in their hands with vaccines as with pollens. Still no one would doubt that there is a sensitization to foreign proteins in these conditions—may be to pollens, egg albumen, milk, animal odors, shell fish, etc., or it is conceivable that this sensitization is against bacterial proteins in the nose or throat, mucin from the respiratory or digestive tract, or may be to ingested food protein. Eustis (16) has long advocated the treatment of asthma by elimination of all or practically all of the animal and vegetable proteins, his theory being based on the assumption that by this means, less poisonous protein would reach the blood stream. Van Slykle and Whipple have shown that feeding large amounts of protein caused marked metabolic changes. So far as I know, Duke (unpublished cases) was the first to treat asthma on this basis of non-specific protein injection. He has treated typical bronchial asthma with typhoid vaccine using dosage sufficient to produce a definite rigor, fever, leucocytosis and one may say usually a typical asthmatic attack. It is fair to say that aside from the surgical treatment of asthma by removal of foci of pus, we have had no better results than this line of treatment. Two cases come to my mind, that of the most severe type, that responded unusually well, being restored from semi-invalidism to earning occupations. It is advisable not to neglect the care of the respiratory tract.

In conclusion it may be said that in applying this line of treatment it is well to bear in mind that this is a "shock therapy," and that there are certain contra indications in its use. It is questionable whether it should be used in alcoholism, delirium tremens, hypotension, hemophilia,

marked valvular heart lesions, cachexia, or marked hypertension. On the other hand, it is not dangerous in the usual dosage given. In the treatment of pneumonia (influenza type), Roberts and Cary (12) remarked that in spite of the chills and the pyrexia, sick patients develop no more serious symptoms. The only deaths, so far as I can learn from the literature, have been from hemorrhages in typhoid, and in delirium tremens, with pneumonia. It is advisable to be cautious of using this in extra-hospital practice, as the severe shock following the intravenous injection is disconcerting to the uninitiated. This may be combatted well by preceding the injection with a small hypodermic of codein or morphine and following the chill with external applications of heat or adrenaline chloride five to ten minims, subcutaneously, thereby shortening the attacks and somewhat lessening the discomfort.

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Walk a mile each day to keep the doctor away, advises the United States Public Health Service. Try walking to work every morning and see if it doesn't make you younger and healthier.

BELL MEMORIAL HOSPITAL CLINICS

Clinic of Dr. M. T. Sudler
Department of Surgery

MALIGNANT GROWTH OF THE KIDNEY

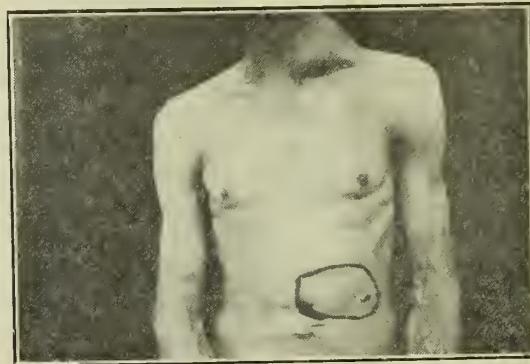
The patient whom we have for examination today is a man 47 years of age, whose family history and personal history are practically negative and have no bearing on his present complaint. Eight weeks ago, he began to have pain in his left hypochondrium. During the past two weeks, he has lost weight and strength very rapidly. For the past ten days, he has been constipated, but otherwise there has been no digestive disturbance: nor has there been any urinary derangement.

Upon examination, the left side of the abdomen is occupied by a hard tumor. This tumor is apparently directly under the abdominal wall in the area marked: but the tumor can be palpated reaching to the brim of the pelvis and well over to the left side. The liver dullness is not increased. The stomach is apparently normal. Lungs and heart are negative. The left side of the neck is occupied by a large painless mass which first appeared six weeks ago, and which has grown rapidly since. The urinalysis shows phosphates, but no blood (which is unusual, hematuria at times being the first symptom noticed by the patient.) The phosphates probably indicate a rapid destruction of tissue; and are frequently found when a rapidly growing or advanced malignant growth is present. They are also present when too much proteid food is consumed. The blood findings show hemoglobin 80 per cent, and 4,400,000 red blood cells. The leukocyte count is normal. An x-ray plate of the abdomen shows that the stomach has been pushed upward. Otherwise, the stomach and intestines are negative.

From the physical findings, it is apparent that we are dealing with a malignant growth which seems to originate in the kidney, which has metastasized in the lymphatic glands at the base of the mesentery of the transverse colon and in the glands at the left side of the neck, just above the clavicle.

Under local anesthesia ($\frac{1}{2}$ per cent novocaine) we shall remove a piece of growth in the neck for microscopical examination and diagnosis. In cutting down, the capsule is definite and well developed: the tumor mass is so soft that some of it extrudes from the incision made in the capsule. It is impossible to cut out a solid piece on account of the softness; hence we shall remove some tissue with a curette for the pathologist. The curette causes very free hemorrhage. The softness and the vascularity both suggest a rapidly growing tumor.

Now that the patient is out of the room, his case and the types of malignant growth



Malignant Growths in Kidney—Outline of tumor in contact with abdominal wall.

that affect the kidney can be discussed. From a practical standpoint, these come under three general headings.

1. SARCOMA. This is usually known as infantile or embryonal sarcoma and occurs before ten years of age. In fact, most of them occur in the first three years. The secreting cells are involved and we have a combination of adenocarcinomatous tissue with sarcomatous elements. It is typical and characteristic. It grows very rapidly, soon occupying a large space in the abdomen. As a matter of diagnosis, the large intestine can often be recognized over it. It is usually rapidly fatal; and is not recognized in time for radical removal.

2. CARCINOMA. These tumors occur at a later period in life, usually after forty. The type of carcinoma depends, of course, upon its origin. A benign adenoma may

become carcinomatous. A carcinoma may arise from the renal tubules themselves, or it may arise from the pelvis. These tumors also grow rapidly, soon metastasize into the abdomen, and are usually not operated upon successfully.

3. HYPERNEPHROMA. The third type of tumors is one concerning which a great deal of discussion has taken place; and is sometimes known as the Grawitz tumor. This occurs most often between 50 and 60 years of age. These are tumors having their origin in adrenal rests. Inasmuch as these occur more frequently in the kidney than in other parts of the body, this structure is most often involved. These

tumor involving a number of structures which can be determined easily upon careful examination, operative removal is out of the question. Therefore, the only thing that we can do is to advise this patient to return to his home where his physician will take care of him, using such treatment as will keep him as comfortable as possible. It is very evident that he has but a few weeks, at most, to live. In fact, successful removal is dependent upon early recognition (before metastases have occurred.) This is often impossible, because malignant growths in the kidney, as in other parts of the body, are not painful until well advanced, involving nerves of considerable size.

PATHOLOGICAL REPORT: Dr. H. R. Wahl

The tissue is made up of a very loose, cellular, papillary mass, with a very small amount of highly vascularized stroma. The tumor cells tend to polarize about the vessels and in places seem to blend with the adventitia of the vessels. Acini, lined by columnar cells occur with papillary epithelial processes. The cells show unusual vacuolization of the cytoplasm. The architecture varies. In some areas, it is perivascular, in others it is papilliferous; and in other places, it is trabeculated with anastomosing cords of epithelial cells. In others, it is sarcomatous, with cells blending with stroma. There are few mitotic figures. No surrounding tissue is available; hence, no note on invasiveness is warranted.

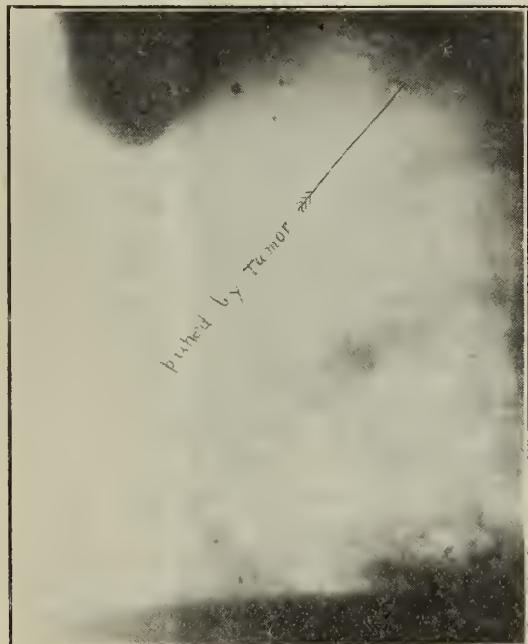
DIAGNOSIS: Lymph node metastasis of papilliferous adenocarcinoma of the kidney.

The Clinic of Dr. E. J. Curran

Department of Ophthalmology

A CASE OF GLAUCOMA SHOWING UNUSUAL FEATURES AFTER IRIDOTOMY

This patient is colored, age 56; right eye blind from Glaucoma with no light perception for four months. Appeared at clinic May 28, 1919; dimness of vision in right eye began 13 years ago. Right eye became blind two years ago with no light perception 4 months before. Left eye dimness



tumors are often encapsulated; and while they grow rapidly, this type offers the greatest opportunity for a successful removal. The matter of the exact classification and histology of these structures is still under discussion. (Da Costa reports removing one, which had been mistaken for an adenoma of the thyroid, until examined microscopically.)

In the case of the patient whom we have just seen, it is evident that there is no possibility of an operation offering any relief. With a rapidly growing malignant

eight years before, which became much worse during the last year.

Vision: R. No light perception; L. 15-30 with difficulty.

Intra-ocular pressure: R. 85 mm.; L. 70 mm. McLean Tonometer. It will be remembered that 40 mm. Hg. is the upper limit of normal tension when taken by a McLean Tonometer which has been used in this case throughout.

Iris: Dark brown.

Pupils: Sluggish.

Anterior chamber: Very moderately shallow.

June 4, 1919: Small peripheral iridotomy done in upper part of the iris in both eyes, each about $1\frac{1}{2}$ mm. in size. Right eye is shown by Fig. 5.

July 9, 1919: No treatment during the last five weeks.

Intra-ocular pressure: R. 50; L. 37. Both anterior chambers normal.

July 9, 1919: Intra-ocular pressure, R. 40; L. 37.

July 11. The second operation of right eye on this day, small peripheral iridotomy in lower part of the iris.

July 14, Intra-ocular pressure: R. 30; L. 40.

July 15, Intra-ocular pressure: R. 39; L. 35.

July 18, Intra-ocular pressure: R. 38; L. 38.

July 21, Intra-ocular pressure: R. 30; L. 40.

July 23, Intra-ocular pressure: R. 33; L. 31.

July 28, Intra-ocular pressure: R. 30; L. 40.

Vision: R. no light perception; L. two letters of 15-15.

July 30, Intra-ocular pressure R. 32; L. 50.

July 30: The second iridotomy in lower segment of the iris of the left eye.

Aug. 4, Intra-ocular pressure: R. 32; L. 30.

Aug. 6, Intra-ocular pressure: R. 38; L. 34.

Aug. 25, Intra-ocular pressure: R. 38; L. 34.

Aug. 30, Intra-ocular pressure: R. 40; L. 37.

Sept. 4, Intra-ocular pressure: R. 45; L. 40.

Sept. 6, Intra-ocular pressure: R. 50; L. 40.

Sept. 8, Intra-ocular pressure: R. 53; L. 40.

Oct. 1, Intra-ocular pressure: R. 60; L. 43.

Oct. 15, Intra-ocular pressure: R. 60; L. 35.

Oct. 22, Intra-ocular pressure: R. 80; L. 35.

Oct. 27, Intra-ocular pressure: R. 55; L. 27.

Oct. 29, Intra-ocular pressure: R. 60; L. 30.

Nov. 12, Intra-ocular pressure: R. 75; L. 50. After two weeks of one half of 1 per cent eserine three times a day.

Nov. 17, Intra-ocular pressure: R. 60; L. 50. Using eserine every two hours.

Nov. 19, Intra-ocular pressure: R. 78; L. 60. 1 per cent Homatropin one drop in each eye every fifteen minutes for two hours when tension was taken again and found to be R. 65. L. 60. And one-half hour after this it was R. 55; L. 50. Patient was ordered to omit the eserine which she had been using every two hours.

Dec. 5, Intra-ocular pressure: R. 65; L. 60.

Dec. 8, Vision R. Hand movements as before. L. 15-20 six letters. Field unchanged.

Dec. 17, Intra-ocular pressure: R. 80; L. 32. No treatment.

Dec. 26, Intra-ocular pressure: R. 90; L. 35. About this time her son was arrested and she was much worried.

Dec. 31, Intra-ocular pressure: R. 90; L. 55. She was now put under eserine for an hour and tension was still R. 90; L. 55. Homatropin was now used in 1 per cent solution every ten minutes for an hour when the left eye dropped to 47 mm. fifteen minutes later to 45. Six hours later the tension was R. 50; L. 42.

Jan. 2, 1920, Intra-ocular pressure: R.

65; L. 42. No treatment since last visit. Atropin 1 per cent solution was used four times fifteen minutes apart and the tension after one-half hour was R. 65; L. 42. The eyes are well under the drug and the tension was taken six hours afterwards and was found to be R. 50; L. 33. Patient was given atropin to be used every four hours.

Jan. 5, Intra-ocular pressure R. 75; L. 45. Atropin discontinued.

Jan. 12, Intra-ocular pressure: R. 80; L. 53.

Jan. 14, Intra-ocular pressure: R. 90; L. 65.

Vision: R. unchanged. L. 15-20 three letters. Anterior chamber exceedingly deep no signs of inflammation anywhere in the eye. The depth of the anterior chamber is extraordinary and it shows conclusively that iridotomy done in the periphery of the iris as described by me does restore the depth of the anterior chamber. It also shows that the anterior chamber which was incapable of taking care of an increased flow of aqueous was made capable by its restoration to provide an exit for this amount for upwards of three months, but when this production of aqueous increased further the anterior chamber became still deeper, thus reversing what usually happens in chronic glaucoma which had not been operated on; and yet it was incapable of providing sufficiently large exit for the excess of aqueous and a second hardening of the eye became evident. We learn one great lesson from this case of chronic primary glaucoma and that is, together with other factors, there is an actual increase of aqueous which when given free access to the aqueous chamber by iridotomy shows in the increased depth. The vitreous is not more voluminous or there could not be such a pushing back of the lens as there is in this case.

It will also be noted that Homatropin and Atropin have an effect of reducing the tension in this patient's eyes after this operation. We shall follow this case fur-

ther and if means cannot be devised for bringing down the tension we shall have to resort to scleral drainage.

The Clinic of Dr. A. L. Skoog

Neurological Dept.

A CASE OF TUMOR WITH AUTOPSY

The material to be presented and demonstrated is of very particular value, on account of our ability to follow the case from a short time following the onset of the illness to the autopsy and microscopical examination of the tumor and the brain. I regret that brevity is required.

Case: W. B. J., Age 33. Family and past history negative. Entered Bell Memorial Hospital October 21, 1918, after first having been seen and examined one month previously. About two months before the first consultation he began to be annoyed with a weakness of the right arm and leg, inability to say certain words properly, headache, especially left side, dizzy spells, and a peculiar sensory disturbance in his right hand. He had never had any vomiting nor disturbance of vision. Nausea and vomiting appeared two weeks after first consultation.

The examination revealed some general weakness, R=L. His gait was fairly good. Power in hand, especially right, was reduced more than that in the lower extremities. All of the deep reflexes were increased, R=L. There was a right Babinski and a questionable Oppenheim; negative on the left. Movements in right arm and leg were ataxic. No true Rombergism was present. There were no anaesthesia or analgesias. In the right hand there was a striking astereognosis, patient being unable to distinguish coins, pens, knife and other objects. Thermal sense normal.

The pupils were normal. The eye-grounds showed some blurring in both discs, R. = L. The veins were engorged to a moderate degree. The papillo-edema was merely suggested. The right fifth and seventh cranial nerves were possibly slightly impaired, the balance of the cran-

ial nerves being normal. There was a marked disturbance in speech, in fact, some students diagnosing the case as paresis. He could repeat quite well a few dictated words, but frequently had much difficulty in finding the words which he wished to use in ordinary conversation. He always promptly knew the correct word that he wished to use. He had the same difficulty with written speech; also much trouble in adding columns of figures. He was able to read quite correctly, but slowly.

A lumbar puncture on October 21, 1918 showed spinal fluid under a pressure of 230 mm., clear, a lymphocyte count of 2.1



Illustration No. 1.—Photograph taken 5 months before death, showing tumor mass at the site of decompression.

per cu. mm. The globulin, goldsol and Wassermann tests were negative.

While in the hospital being prepared for the operation, he had a pulse ranging from 58 to 36.

On account of the certain evidence of general intracranial pressure, the severe headaches, slight right palsy, the pain focalising in the left parital region, and especially the right astereognosis, and the chronological sequences; the diagnosis of a tumor in the left parietal lobe was made, especially centering at the marginal gyrus. An operation in this region was advised, consented to, and performed by Dr. Hertzler on November 11th, 1918. A large skin and bone flap was turned down over the area indicated under a local anaesthetic. The dura was opened and an underlying tumor found involving a large area of the brain and apparently extending to

some depth. The appearance of the tumor was distinctly gliomatous. On account of the extent and type of tumor found, it would have been contra-indicated to try to remove same; therefore, the bony part of the flap was removed and a decompressed area left by leaving the dura open, and covering the defect with fascia and skin flap.

The patient suffered very little pain during operation and made an ideal one for local anaesthesia. He was able to be up and about in five or six days, and left the hospital free from many of the annoying symptoms on November 19th, 1918. His pulse rate continued to remain slow; the astereognosis remained the same; the speech improved somewhat.

The subsequent course, for about nine months, was a comforting one. At one time he felt almost capable of going to work. The tumefaction at the operated area continued to gradually increase in size, until shortly before his death it measured 39 cm. at its greatest circumference. One of the accompanying cuts shows the patient about five months before his death. During the past three months of his illness he was more or less helpless and suffered from some peculiar pains in the head, the decompressed area being especially hypersensitive. About four months before his death he had a slight sinking spell followed with a much impaired vision for about two days, to which time his vision was fairly good. On six occasions during the course of the illness the tumor was punctured, at times to a depth of three cm. On four of these occasions much yellowish transparent fluid was removed. It was extremely rich in albumen. Shortly before his death a papillo-edema had increased up to two diopeters, much vision remaining. No retinal hemorrhages were present. Some mystagmus was seen when the patient looked to the extreme left or right. He had been confined to bed for three months.

On December 15th, 1919, the patient had a convulsion, twelve successive ones following in rapid succession in the course

of one hour. He then remained in coma and died in fifteen hours from pulmonary edema. An autopsy limited to the head was permitted and performed four hours after death.

GROSS PATHOLOGY

I am indebted to Dr. Wahl of the Pathological Department for aid at the autopsy and in the preparation and interpretation of histological slides. A photograph of a transverse section through the brain and tumor mass illustrates the great size of the tumor, all weighing 2,260 gms. The normal male brain weighs about 1,250 gms. The large tumor mass protudes from the left parietal lobe. Its consistency is soft and pliable. The dural covering is quite adherent. The tumor has a gray translucent color with some areas of diffused hemorrhage. In following the tumor through its peduncle where it protruded through the bony opening, you can see that it extends to the lateral ventricle; therefore its involvement of the brain substance is quite extensive. The choroid plexus of both lateral ventricles was invaded. The posterior part of the corpus callosum is involved. It has completely overwhelmed the left isle of Reil much of the internal capsule, left temporal lobe, and motor and sensory region of the left side. The tumor tissue cannot be clearly demarcated from normal brain tissue. It is distinctly an infiltrating tumor. It is subdivided into lobules by bands of connecting tissue. Some areas of necrobiosis and brain tissue softening is quite evident.

HISTOLOGICAL PATHOLOGY

The tumor is richly cellular, and having a considerable amount of fibrillary matrix. Different areas of the tumor mass present a varying picture. "The cells are loosely arranged with no definite architecture in some foci and in others they are polarized about small vessels on clumps of fibrillæ." The cells show quite a variation in shape and size. There are numerous protoplasmic processes, which blend with fibrillæ of the stroma. Some cells are very large and contain several

neuclei, even suggesting a typical ganglion cell. There are also cells of a low order of differentiation. Many small foci of necrosis are present.

The pathological diagnosis is quite evidently a glioma with a number of different types of glial tissues presented, in fact, so many different types are presented that at times, we are almost tempted to consider the possibility of some variety of a mixed tumor.

RESUME

This case is of great interest from the standpoint of a case studied over a long period to its final termination.

It indicates the value of the stereognostic sense as a localizing phenomenon. It



Illustration No. 2.—Transverse section thro tumor and brain, showing tumor involving parietal lobe, internal capsule, central ganglia and ventricles.

illustrates how large a tumor may grow before causing death, if it has room to expand.

The decompression here was selected to be made at the site of the tumor after it was discovered that the neoplasm was too extensive and in such a location that it could not be removed without unnecessarily jeopardizing the patient's life or his cerebral faculties. Normally, we usually advise that areas for a decompression be selected underneath the temporal muscle, preferably the right side, or the suboccipital area. These areas are selected because a certain amount of fascia and muscle covering is present to cover the underlying brain substance where bone has been removed.

The pathological data is of particular value in that the material shows several varieties of gliomatous tissues within the same neoplasm. Histologically, in the normal human brain are found about as many varieties of glia cells as neuronal cells. Accordingly it is quite rational to assume that we may find a pure glioma with several types of cells. A glioma is a variety of a tumor found only in places where in the normal state there exists neuroglia cells.

The Clinic of Dr. Nelse F. Ockerblad

Department of Genito-Urinary Surgery

THE TABETIC OR NEUROGENOUS BLADDER.

It is such a common thing to have patients present themselves for treatment at our out-patient clinic for the relief of bladder disturbances, and to find on careful physical examination that the patient has a lesion of the spinal cord or of the central nervous system, that we never neglect making a complete and detailed physical examination, and to examine the urine, blood and spinal fluid.

It has been shown by Erb and others that something like 30 per cent of tabetics give disturbances of micturition as a part of the clinical picture. A much higher percentage than this have bladder symptoms at some time in the course of their disease, and this has been estimated by some to be from 80 to 93 per cent. It has been our experience that these figures are quite nearly right.

Burns at the Johns Hopkins clinic, and more recently Caulk, Greditzer and Barnes of Washington University have given us much of the details of the pathology and urologic findings in these cases. Such patients complain of urinary frequency, incontinence, difficulty, dysuria, retention, pain over the bladder, and often loss of sexual power. Any one or any combination of these symptoms may be complained of. Before coming to our clinic these patients have often been treated for stricture, cystitis, gonorrhea, and some have even been operated upon for supposed enlargement of the prostate. It is so easy to begin to treat the symptoms before

discovering the true pathology, that one must be on his guard constantly in order not to make a blunder that will be costly to the patient and embarrassing to the physician.

When infection of the bladder or cystitis is added to the effects of the cord lesion, we then have a condition that may be quite resistant to treatment and change the clinical picture somewhat.

The pathology of the tabetic or neurogenous bladder is primarily the pathology of the central nervous system lesion and the effects of the paralysis upon the bladder and the urethra, and secondarily, the effect of the cystitis or infection. The reason that all tabetics do not have bladder symptoms early is that all do not have lesions of the cord at the same level. In this connection we may recall that the bladder derives its nerve supply from the sacral nerves, the hypogastric, and from the inferior hemorrhoidal and prostatic plexus. These nerves have their origin in the third, fourth, and fifth lumbar, and the second and third sacral nerves. They also have fibres from the sympathetic and inferior mesenteric ganglia. Thus we may see that any lesion of the spinal cord that is lower than the root of the third lumbar is sure to cause bladder disturbances. The pathology of the relaxed and enervated bladder and urethra should be interpreted with the cytoscopy picture and the X-ray findings in mind. It is a well known fact that the bladder of the tabetic is trabeculated; that these trabeculations are not always present in the very early cases is not so well known. We may remember in this connection that the normal bladder is only sensitive to the pressure exerted by fluid contained within it, and its mucosa is scarcely more sensitive to touch than the skin which it resembles in many ways. This is changed in the type of bladder under discussion, for it (this bladder) is very tolerant to pressure, and the posterior urethra is not sensitive to touch, it is to speak, anaesthetized. In passing a cytoscope in to one of these bladders one notices that the pos-

terior urethra, especially the prostatic portion, is so relaxed that it does not grip the cystoscope like a normal urethra. It is also noted that the bladder usually contains a large amount of urine, not always residual. It is a further observation that the patient will usually tolerate a large amount of fluid in the bladder without complaining. In the normal bladder the capacity is about 300 c. c. to 400 c. c., while in the tabetic bladder the capacity is greatly increased and the bladder will hold from 600 to 1000 c. c. without discomfort. Gaulk, Greditzer and Barnes have pointed out that the inter-ureteric bar is raised and thin and that laterad to the ureteral openings the trigone spreads out into fan shaped trabeculae. Cystograms made with thorium show sometimes a funneling of the deep urethra and these authors have shown that cystograms made with the patient lying down and standing upright show a toppling forward of the bladder due to the relaxation of the various ligamentous and muscular supports in that region. When, as is often the case, a cystitis is present we may have, instead of a bladder that is enervated, one that is hyper-sensitive, and instead of being relaxed it is contracted and of small capacity. The mucosa then instead of being pale and trabeculated may be acutely, or more properly, subacutely inflamed and of a velvety texture between the trabeculations.

The point I wish to establish is that the diagnosis should be made before the cystoscopic examination is made for there are many things in the bladder picture as seen with the cystoscope that may lead one astray if he expects to make his diagnosis on these findings alone. It has not yet been established that cystoscopic findings in these cases are invariable enough to be absolutely diagnostic.

When the diagnosis has been established by means of the physical findings, the blood Wassermann, and the examination of the spinal fluid, especially the colloidal gold, the cell count, and the globulin and

Wasserman, we must proceed to treat the patient for his syphilis in order to restore his normal bladder function. The earlier the patient is seen after the beginning of his symptoms, the better he responds to treatment. In some of our early cases one injection of arsphenamine restored normal function. In others, six months of arsphenamine, potassium, iodide and mercury was necessary for a cure of the bladder disturbance. Some of our patients were treated with arsphenamized serum injected intra-spinally by the Swift-Ellis method and some were treated with intravenous injections of arsphenamine. Both methods gave good results.

Whenever there is an infection of the bladder it is necessary to use irrigations of some antiseptic solution to render the bladder sterile. The best solution for this purpose is silver nitrate in strengths of from one to ten thousand, down to one to one-thousand. This solution used at a temperature of about 52 degrees centigrade twice a day will usually clear the infection up in a few weeks if used in conjunction with the arsphenamine-mercury-potassium iodide treatment. Other substances such as the flavines and merurochrome 220 are now being used for this purpose, but it is too soon to judge of their value.

This quite common form of bladder disorder is one that should not be overlooked by the average physician, since in the majority of cases through physical examination alone will establish the diagnosis, and in the remaining minority of the cases the diagnosis may be established by the examination of the blood and spinal fluid.

B

Cattle are fattened for slaughter by being overfed and not allowed to exercise. Many men and women prepare themselves for slaughter by voluntarily adopting the "stall fed life," says the United States Public Health Service. Don't overeat and take plenty of healthful, outdoor exercise.

THE JOURNAL
of the
Kansas Medical Society

W. E. McVEY, M.D. - - Editor

ASSOCIATE EDITORS—L. W. SHANNON, C. C. GODDARD, P. S. MITCHELL, O. P. DAVIS, J. J. BROWNLEE, E. S. EDGERTON, W. F. SAWHILL, H. N. MOSES, C. S. KENNEY, D. R. STONER, J. A. DILLON, W. F. FEE.

Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

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Wider Scope for Activities of Medical Organizations

Medical organization is no longer a sentiment, it is a business proposition. Perhaps the earlier organizations were purely scientific, but there was always the motive of self improvement behind them. So today self improvement is one of the motives of our society organization, but the field for self improvement has expanded and the functions of our societies must be multiplied as well as diversified. While the scientific features may remain the same, conditions demand that all these organizations shall offer such additional benefits as may legitimately be developed from combination and cooperation.

Organization has already produced some remarkable improvements in medicine. As an example it is only necessary to mention the advance in medical education over that of twenty five years ago.

If it would but realize the possibilities, each state society, and each county society may make itself indispensable to the profession. Our own state society began to realize that something more could be done

for its membership than it had been doing, several years ago, when a plan was submitted for the establishment of our Defense Fund. It took three years to develop our present plan and to secure its adoption. The fact that the number of damage suits against physicians has been greatly diminished is, in itself, evidence of the benefits resulting to the membership. It has also shown that medical organizations may properly and profitably extend their activities beyond the usual scientific program.

There are several functions that might be assumed by our state society greatly to the benefit of the profession, whenever the members are so convinced of their practicability and beneficial results as to be willing to contribute the necessary expense. For the present the society can only undertake to provide such benefits as its present income will permit, or in other words, that are practically self supporting. Even on this basis something more can be accomplished and at least one plan is ready to be put into effect.

CREDIT AND COLLECTION BUREAU

At the January meeting in Kansas City, the Council authorized the establishment of a Credit and Collection Bureau for the members of the Society. Any member of the Society may send his overdue accounts to the Bureau for collection. A series of notices and letters will be sent to the delinquent debtors. All the stationery used will indicate that the Bureau is a department of the State Society. This alone will suggest to many such delinquents the wisdom of making a settlement. All or these claims will be followed up persistently until they are paid or it is determined that the claim is worthless. Where debtors have moved and left no address, efforts will be made to trace them. When an overdue account is received, if the debtor does not make immediate settlement, the Bureau will ascertain if other physicians also have unpaid accounts against him. When it has been determined that it is impossible to collect an account, the name of the debtor and the

number of unpaid accounts against him, together with such information as it is possible to secure, will be sent to the secretary of the county society for the information and protection of its members.

The name, address, or various addresses, of each debtor against whom an account has been received, will be kept in a card index file together with all the information obtainable concerning him. This in time will be of great value for credit reference. When desired to do so the Bureau will endeavor to supply the credit rating of any of its member's patrons. At first this will necessarily require a little time but in those instances where a man has recently come into a community it may be well to know his credit rating with the physicians of his former place of residence.

The Bureau will be conducted in connection with the Journal and the columns of the Journal will be used for obtaining and supplying information. The necessary blanks, records and stationery are being prepared, but overdue accounts may be sent to the Bureau for collection at once. They will be given immediate attention. Address all such communication to the Kansas Medical Society, C. & C. Bureau, 304 Commerce Bldg., Topeka, Kansas. The success of the Bureau will depend upon the extent to which you take advantage of the opportunity it offers. Do not underestimate the benefits that will accrue to you by its success.

A DIRECTORY

The Council also authorized the Editor to collect the data and prepare the copy for a Directory of the Physicians of Kansas. This directory will contain a copy of the medical laws of the state, the state medical boards, state medical institutions, hospitals, etc. It will contain the name of each physician in the state who is practicing medicine, with his address, date of birth, the name of the college from which he received his degree in medicine, the year of graduation, the year he was granted a license to practice in Kansas, his specialty if any and probably other

information. The names of those who are members of the Society will be printed in capital letters. We are now sending out to the secretaries of the county societies, lists of the physicians in their respective counties, and asking them to make necessary corrections. As soon as these are returned, blanks will be sent to each physician to be filled out and returned to us. An opportunity will also be given to each one to subscribe for the directory at pre-publication price which will be appreciably lower than the price after publication. The number of copies published will be determined by the number of these advance subscriptions. If you want a copy don't fail to fill out the subscription order.

LARGER AND BETTER SOCIETIES

In a recent number of the Journal it was suggested that if the small and weak, or inactive societies would combine with larger ones or with each other, forming multiple county societies, they would be vastly more interesting, of greater value to their members and more attractive to members of the profession who ought to be members. In pursuit of this plan questionnaires were sent to all the secretaries of county societies, except a few of the largest. The following questions were asked:

How many members in your society?

How many eligible physicians in your county who are not already members?

How many meetings have you had during the year 1919?

What was the average attendance?

What county societies (one or more) could be combined with yours with advantage to both?

What adjacent or neighboring counties, now with no medical society, could be included in the territory of your society?

In your opinion would the members of your society be favorable to a combination which would tend to make a larger and better society?

We received twenty-three replies and of these only three believed their societies would consent to make any sort of combi-

nation. Even in one or two instances, when no meeting had been held for a year, the idea of improving their society by combining with other counties seemed objectionable.

The Editor of the Journal prepared a map of the counties showing those that are organized and nominally organized, the relations of the organized to the unorganized counties, the number of members in each county society and the number of physicians in the county, and a possible grouping of county societies into multiple county societies where it appeared that stronger organization would thus be developed. The Council was favorably impressed with the plan but it was generally agreed that no successful combination could be made without the hearty cooperation of the societies themselves. If a few combined meetings of a number of small societies could be arranged and interesting programs prepared the members would no doubt see the greater possibilities for greater benefits in larger organizations. It was decided however that all unorganized counties and all counties where the societies have become inactive, must be included in some other organization. The Secretary of the State Society and the Editor were appointed a committee to work out plans for such combinations as would seem to be indicated and to cooperate with the Councillor of each district in forwarding a movement for larger and better societies.

Any plans which may be devised for the benefits of the society members will be greatly facilitated by the strong and harmonious county or multiple county organizations. There are great possibilities for material benefit in the Credit and Collection Bureau, but these benefits will naturally be realized to the greatest extent where there is a well organized society.

R

Etcetera.

Dr. Charles L. Mix, Professor of Physical Diagnosis Northwestern University Medical School will deliver an address to

the members of the Shawnee County Medical Society, Monday Evening, March 1.

If a seance at a picture show causes discomfort to the eyes it is probable that there is some defect in the eye that should be corrected.

Banana peelings make good slippers.

The date for the next regular meeting of the Northeast Kansas Medical Society has been changed from February 26 to March 25. The meeting will be held at Topeka on the latter date.

The physicians and dentists of Kansas City, Mo., are planning to erect a fourteen story office building at Eleventh and Cherry streets. It is estimated that the building will cost \$1,250,000.

In spite of the failure of every experimental effort to transmit the disease by these methods, the public health authorities seem to be convinced that "Spray infection through the mucous droplet, projected into the air and—far more important—received fresh and teeming with living bacteria directly upon the nasal conjunctival and buccal mucous membrane of another through speech, cough, sneeze, song or other vocal effort, usually in crowds or groups of people, is by far the most fruitful method of communicating influenza."

A man may be a good blacksmith or a good surgeon, but he cannot be both a good blacksmith and a good surgeon.

FULLY QUALIFIED. "He spoke eight languages, and this linguistic talent combined with his surgical skill, made his place in the world of *materia medica* a unique one."

It has been shown that if a limb is severely crushed shock is produced. There is a protein breakdown in the crushed tissue and toxic substances are produced which when absorbed may cause or aggravate shock.

Dr. A. B. Cullom, formerly of Garnett, is now located at 15 S. Lincoln St., Chanute, Kansas.

Higgins (Surg. Gyn. & Obstet. Dec., 1919) observes certain effects from the absorption of toxins incident to the growth of uterine fibroids. Among these are changes in the heart muscle, nervous symptoms and frequently infection of the kidneys. Where profuse hemorrhage accom-

panies the growth there is a brown atrophy of the heart muscle with degenerative changes.

Dr. C. A. Thomas has moved from Edna to Coffeyville, Kansas.

J. Ogden Armour says (The Armour Magazine, Jan., 1920): "A person is never old until he quits growing; and he need not quit growing until the end of his years. The most conspicuous fact about great men—men who do big things—is that they never cease growing. The perpetually young."

Dr. W. O. Clark has returned to Topeka after spending a year in the hospitals on the Pacific Coast.

The U. S. Public Health Service is conducting a health survey in Missouri, and a demonstration of child hygiene work in the school and home. This is intended to be an unusually comprehensive effort on the part of the Public Health Service and it is hoped it will be able to establish standards for such work. It seems that Missouri has only recently created a department of child hygiene and the State Board of Health requested the Public Health Service to make a demonstration for them. Dr. C. P. Knight, P. H. S. is in charge and he is assisted by Dr. Lydia A. DeVilbiss, formerly in charge of the department of child hygiene in Kansas.

Dr. Charles M. Brown is now located in the Portsmouth Building, Kansas City, Kansas.

On February 18 and March 17, competitive examinations will be held by the U. S. Civil Service Commissions for physicians to fill vacancies in the Panama Canal Service. The entrance salary is \$200 a month; promotion may be made to \$225, \$250, \$275, \$300 and to higher rates for special positions.

There is to be held in Chicago, Feb. 17, -19, a national conference on concrete house construction. The question of housing the people has become a serious one and if some plan can be devised for the construction of better and more sanitary homes on some economic basis it would seem that the great architects, builders and financiers of the country may well confer together upon the prospect. The concrete house makes a durable and sanitary home, and if some plan can be devised whereby it can be constructed

cheaply a great service will be rendered the public.

It was a fortunate coincidence that the Wyandotte County Society held its annual banquet on the evening of the day the Council had its mid-winter meeting. Fortunate for the Councillors, for they were invited to attend the banquet. They had a strenuous session and were glad to relax, especially with plenty to eat—and smoke, good music and dancing, and other forms of entertainment. The members of the Wyandotte County Society appear to have the get-together spirit in abundance.

We understand they expect to have every eligible man in the county in the society—very soon.

The annual Conference on Public Health and Legislation has been called by The Council on Health and Public Instruction of the American Medical Association to meet in Chicago on Thursday, March 4. The meeting will be held in the South Parlor of the Auditorium Hotel.

The officials to whom has been delegated the duty of enforcing the prohibitory law, seem to be having an unusual amount of difficulty in determining what medical preparations should be classed as intoxicating beverages. The druggists are receiving different instructions every day. The list of formulæ for the medication of alcohol for non-beverage purposes has been changed repeatedly. There are now seven formulæ permitted. None of these, however, can be regarded as safe for home use. Evidently it will not be possible for physicians in Kansas to purchase alcohol in any form that can be used safely for any of the purposes for which it is frequently required.

All those interested are cordially invited to be present at the annual Congress on Medical Education and Medical Licensure. This Congress is held under the auspices of the Council on Medical Education of the American Medical Association, the Federation of State Medical Boards of the United States and the Association of American Medical Colleges. It is to be held in the Florentine Room at the Congress Hotel, Chicago, Monday, Tuesday and Wednesday, March 1-3, 1920.

Botulinus poisoning which recently killed six in one family in New York is caused by eating spoiled food infected with the bacillus botulinus, say the officials of the Bureau of Chemistry, United States

Department of Agriculture, who have investigated this and other poisoning cases in connection with the enforcement of the Food and Drugs Act. In the New York case death was caused by botulinus poison in ripe olives. The olives remaining in the bottle in this case had an offensive odor. The same condition was found in the food in other cases investigated by the department. All spoiled food does not contain this poison, but any spoiled food even though the spoilage be slight may contain it, and for this reason, say the officials, all food showing even the slightest unnatural odor, unnatural color, swelling of container, signs of gas, or any evidence of decomposition whatever, should be discarded.

To relieve any confusion that may exist in the minds of former service men on account of the special provision of lapsed War Term Insurance which authorized reinstatement up to December 31, 1919, regardless of date of discharge, announcement is made by Director R. G. Chomeley Jones of the Bureau of War Risk Insurance that the provisions for reinstatement of lapsed or cancelled insurance, within 18 months from date of discharge, upon payment of only two months' premiums on the amount of insurance to be reinstated, provided the insured is in as good health as at the date of discharge or expiration of the grace period whichever is the later date, and so states in his application, still hold good.

A new and very attractive pocket booklet on "Influenza, Colds and Catarrh," has recently come to our notice. It presents in concise, readable form some interesting facts regarding the history and etiology of the disease, and also regarding preventive and curative treatment, with hints as to dosage, etc. This booklet may be read with profit by every physician and druggist in the country. Typographically, it is exceptionally good, and the illustrations are interesting. Copies may be obtained free of charge by writing to H. K. Mulford Company, Philadelphia, Pa.

The following notice has recently been sent out:

"In harmony with the requirements of the By-Laws, attention of interested parties is called to the meeting of the Tenth Decennial Pharmacopœial Convention of the United States, to be held beginning at 10:00 a. m., May 11, 1920, at Willard Hotel, Washington, D. C. All incorporated

bodies in other institutions entitled to membership in this Convention are entitled to at once apply to Dr. Noble P. Barnes, Arlington Hotel, Washington D. C., for the necessary blanks for membership in the Convention."

The importance of blood pressure observations in surgical prognosis has been emphasized by Moots and McKesson. The following rules have been established for the safe guidance of the anesthetist and surgeon:

BLOOD PRESSURE RULES: "There is no form of anesthesia, there is no age of patient, there is no type of operation in which one expects to see an elevation of blood pressures during the operation. Our fears are from low blood pressures, rapid pulse rate, and heart fatigue.

"Circulatory Depression or Decompensation is best divided for surgical operation into three degrees:

"**SAFE.** 10 to 15 per cent increase on pulse rate without change in pressure. 10 to 15 per cent decrease in blood pressures without change in pulse rate.

"**2. DANGEROUS.** 15 to 25 per cent increase in pulse rate with 15 to 25 per cent decrease in blood pressures.

"**3. FATAL.** Progressively increasing pulse rate above 100 with progressively falling blood pressure of 80 or less systolic and 20 or less pulse pressure, for more than 20 minutes."

Forty-five members of the Alpha Kappa Kappa medical fraternity spent a day recently going through the Chicago plant of Armour and Company.

A special program was arranged in their honor, and they were shown through several departments which are not on the regular visitors route, but which were considered of special interest to them as medical men. They were the guests of Lester Armour.

Before going over the packing house route, the members of this medical fraternity were served with bouillon at the Visitors reception room. On the completion of their journey through the plant they were escorted to the chipped beef department where a buffet luncheon was served. In the meantime they were shown the various processes of converting meat animals into meat products.

The visitors expressed themselves as being particularly interested in the trip to the U. S. Government Inspector's Office, where Dr. J. H. Wheland explained the activities of the Bureau of Animal Indus-

try. Dr. Frederick Fenger of the chemical laboratory told of the work of his department and also of the important part played by chemistry in the meat product industry. Dr. Volney S. Cheney, medical director of the company, described the work of Armour's medical department in safeguarding the health of all employees.

Announcement is made of the launching of the National Anæsthesia Research Society, with the avowed purpose of collecting data and prosecuting original research in this field of medicine. The objects of the Society as set forth in the constitution are:

The Research Committee which will have supervision of original work and the editing of material designed for the profession and professional press, is headed by F. H. McMechan, A. M., M. D., of Avon Lake, Ohio, editor of the Quarterly Supplement of the American Year Book of Anæsthesia and Analgesia. W. I. Jones, D. D. S., President of the Inter-State Anæsthetists' Association, will have an active part in the committee's work. Representative anæsthetists of the country, who have distinguished themselves by research and progress in their field, are being invited to join the committee.

The Society has been endowed with limited funds which will permit it to demonstrate that there is a field of usefulness for it.

As a result of a letter sent out from the Division of Venereal Diseases of the Public Health Service, 60,666 physicians signed agreement cards pledging themselves as follows:

1. To report cases of venereal diseases in accordance with the laws and board of health regulations.

To secure prompt treatment for all venereal cases coming to his attention, either treating them himself or referring them to a clinic or physician known to be competent in the treatment of such cases.

3. Not to dispense medicines for venereal diseases except where they can not be obtained from a drug store; and not to recommend, prescribe, or sell any proprietary remedy marketed for the self-treatment of venereal diseases.

4. To give every venereal disease patient a circular of instructions, a supply of which is to be furnished free of charge by the Public Health Service or the State Board of Health.

Fables for the Kansas Doctor

By Renig Ade

Once upon a time there was a Doctor in a small town who became tired of the grind of a country practice and longed to go to the city. For twenty years he had gone down town each morning meeting the same individuals and listening to the same jokes until it had "gotten on his nerves." In former times the first sally to greet him usually came from the livery-stable man who would cheerily shout, "Well Doc have you buried any more of your mistakes this morning?" This was always good for a hearty laugh from three or four manury scented co-workers. Later when the livery barn went the way of the top buggy and the coal oil lamp, the same working crew moved into the garage and dispensed their witticisms with a gasoline and lubricating oil finish. At the postoffice every morning where everyone waited for the mail to be distributed the jests flew thick and fast each individual laughing uproariously at his own particular sally. This is small town courtesy and has no counterpart except in our congressional proceedings where an orator may have "applause" inserted in his printed articles where ever he desires. Just what good results from this we are unable to say as no constituent has ever owned up to reading a speech entirely through.

However, we say if it will satisfy our legislators and keep their minds off garden seed let them have "applause" written after every period and comma. But we digress. After the mail was "disturbed" as the village jester termed it, everyone went back to his or her work. The checker game was resumed at the drug store, and the horse-shoe game behind the printing office. The Doctor put up another box of salve for old lady Jones' sore leg that he had been treating for ten years, and then went out in the country to see Henry Spivens who was threatened with typhoid fever. He found Henry fixing the roof of the granary and telling a neighbor how Doc broke up his typhoid.

After a little persuasion the doctor stayed for dinner as he saw fresh chicken feathers at the back stoop and also smelled noodles. This combination had more than once upset the doctor's pre-arranged plans. After dinner the doctor confessed to having had no sleep for three nights and would lie on the lounge behind the stove in the sitting room. This more than pleased Mrs. Spivens who was always pleased to

JAN 7

do something for their doctor. Besides, the latter had spoken very flatteringly of the noodles. They called him three hours later and he managed to get home in time for supper. A picture show after supper completed the strenuous days work. The next day in company with Bill Hinkle and two other good friends he drove over to the head waters of Dog Creek for a days fishing. They had some live minnows for bass and some very dead ones for catfish. The latter were especially rank and were very noticeable at first. However they happened to bring along a quart of something that made them ignore all smells and made the doctor and Bill Hinkle social equals before 10 a.m. They got home about dark with one small bass and two glazed eyed mud-cats vowing they had never had a better time. The next day they were kept busy lying about their fishing trip and did not get much business attended to altho the Doctor managed to make his calls after going to the post-office in the morning. The following day the high school team played football at Squintville 11 miles south and "Doc" who was one of the main backers of the team went over, of course, with all the rest of the red bloods. While naturally not of a belligerent disposition, he would wave his arms, jump frantically up and down, and exhort his home team to "eat em up" "kill em" etc. And when some scrawny, pimply faced warrior of 16 years, weighing about 80 pounds would be carried to the side lines with his differential twisted, the Doc's joy knew no bounds. He would glare fiercely at the lame barber from the enemy town as if to defy him to take it up. The fact that his team was defeated 55 to 0 never diminished his faith in its superiority, nor rendered his partisanship less cave-man in intensity. A day or two after the football game he managed to get away for a days duck shooting and, as was his custom, tried to get down to the marsh about every other day until the season was over. Later he attended the wheat-show at Wichita and also had a lot of fun watching some friends join the Shrine.

While in Kansas City taking in the motor show and cabaretting about all his joints would stand, he met and visited an old friend who had been located there since he and Doc had graduated. He found a lean hungry individual who had not taken a day away from the office for five years and looked it; but who was planning to take a weeks vacation to the

country the coming summer. When Doc told him of the daily grind he went through his friend took him to one side and whispered confidentially that the wise thing to do would be to hurry back before someone located there. Weird and unclassified smells greeted his nose from unexpected sources. It varied from the scorched buzzard effect of the packing house district to the interior aroma of some of the street cars which he mentally compared to a basket of pups under a squaws apron. He stayed in the city long enough to be shoved around by two evil looking foreigners, whom he learned afterwards were policemen, and to have his pocket picked by a sad looking young lady who fainted on his shoulder in the elevator. Then he decided the city was no place for him.

He slipped the customary two quarts in his grip, left the show early to catch the train, crawled into his berth and woke up next morning back in the little "Old home town." The next morning at the Post-office everybody asked him about K. C. and two or three of his best friends looked him square in the eye with a pronounced rising inflection in their countenances. Just a suggestion of a wink was a countersign to this.

That evening after the picture show they all met at the bankers home and took out a small stack of blues, the guest of honor being the Doctor's grip he had brought from K. C.

Moral. And pity tis, tis true.

R
Man-Ape
BY THE PRODIGAL

It is a reversion to the original type-tavism; or evolution backing out.

Comforting news comes from one Dr. Veronoff, a famous French Surgeon of Paris. The glad tidings were transmitted by the International News Service. The interview was given to Ward Price, special correspondent of the Paris edition of the London Daily Mail, by Dr. Veronoff who said: "At the present moment, in France, there are two old men whom I have restored to youthful health and vigor by grafting into them testicular glands from a young ape. One man was operated on several months ago. He was sixty-six years of age and his vitality had been exhausted by hard work. His figure was bowed and he looked decrepit. Now he walks upright and with the utmost vigor. His brain is clear and active. He sleeps well and has the hearty appetite of a man

in the prime of life." Jes so. Such a report is in keeping with the Brown Sequard craze of the eighties, in which testicular juice injected into the aged restored virility. On every street corner old men were to be seen, hobling and limping along, with a hypodermic abscess in the leg, the result of an injection of the virile elixir which restored nothing. They had the trouble and the pains for their credulity and money. The last syllable of this new doctor's name signifies—off. However the necessity for this new discovery does not appear in the off-ing.

The old men should have a rest. Young men have some rights that old men should respect. Old men may be used in war-stricken Europe to lessen polygamy and government owned children, but not in the United States or its possessions.

But if this left handed miscegenation must come, we should look on the bright side of it for future generations and make a record of the conveniences which these hybrids will experience and enjoy by the mixture. These menapes or mongrels will be great tree climbers. Tree climbing will be the world amusement. The cross should be with the tailless ape so as to do away with the tail. This tailless variety will save clothing and damage to chairs. Having short, bandy, rudimentary legs, reaching from the body to the ground and long arms and bodies, the hands or paws will drag on the ground when they walk upright. Setting out cabbage plants and tomato plants, thinning beets and picking up potatoes will be their peculiar forte. Old H. C. L. will be a tradition.

Hirsute will be the wearing apparel, automatically grown and colored, clipped in the springtime for summer use—except in the case of a few empties of the female human species who insert their lower extremities in a pair of one legged trousers and go scizzoring along the street, tripping over pins and other like foreign bodies. However that class of creature will not increase, for the same reason that Josh Billings gave for the mule not breeding: "When the Creator made a mule He got ashamed of himself and kwit."

The sweating will be through or by the mouth, the same as a dog sweats. The mouth will drop open a little and the tongue loll out when tired. This condition will be an improvement on the chewing gum habit of this generation. Hats will not be worn. The forehead will be so low that the tears will run

down the back of the neck, doing away with the handkerchief. The nose will be club-shaped and dandy to ring and hang bri-a-brac on. There will be no bridge to the nose, but there will be enough knowledge of surgery to fashion a lump or wart on it big enough to hold a nose glass if needed. If a living desire remains to study entomology, the insects indigenous to man and beast will be present in countless numbers.

Many more advantages might be recorded to encourage posterity for the loss tradition may hand down to them of the superiority of mere man, but these few suggestions will serve to arouse suspicion and allay fear. With all these advantages in favor of the manage the Prodigal has held to the belief that man had one on the ape in being able to walk on two legs instead of four and in some other things he has forgotten. But when the daily press gives such wide-spread publicity, at such enormous cost, to such twaddle and the gullible people will stand for it and pay for it, the Prodigal withdraws judgment and is a stranger to his own, the genus homo.

R

MEDICAL SCHOOL ITEMS

Progress of the Alumni Association of the University of Kansas

A few months ago an Alumni Association of the University of Kansas, School of Medicine, was formed. The members include all graduates of the various schools which combined to form the present University of Kansas Medical School.

Circular letters were sent to all graduates whose names were available at the time, urging them all to be present at the first meeting. Quite a large number responded either by their presence or by letter and the first meeting was very successful.

The following officers were elected:

President. C. B. Francisco, Kansas City, Mo.

Vice-Presidents. Dr. Thomas Hyatt, Topeka, Kansas; Dr. J. P. Kanokey, Kansas City, Mo.; Dr. D. W. Basham; Wichita, Kansas; Dr. G. M. Gray, Kansas City, Mo.

Secretary and Treasurer. Dr. D. R. Black, Bell Hospital, Rosedale, Kansas.

Executive Committee. Dr. C. C. Nesselrode, Kansas City, Kansas; Dr. J. M. Frankenburger, Kansas City, Mo.; Dr. Rex L. Dively, Kansas City, Mo.; Dr. R. W. Holbrook, Kansas City, Mo.; Dr. J. L. Myers, Kansas City, Mo.

Since the meeting the Secretary has maintained an office at Bell Hospital and has obtained a complete list of the graduates, numbering between 900 and 1,000. Letters have been sent to each of these urging them to join the Association as Active Members. At the present time we have 300 members on the Active List and possibly some 600 who have either failed to answer the letters or whose addresses have been changed.

We are planning to keep the office open for about two more weeks and at the end of that time we will reduce our mailing list to Active Members only.

At present plans are underway for an Annual Home Coming Week early in the fall. We expect to have clinics and scientific papers given by different members and to arrange for a bigger and better program for the following year.

If you have failed to send in your name, address, school and year of graduation and a dollar for dues for 1920, please do so at once.

D. R. BLACK, Secretary and Treasurer.

R

Dr. R. H. Wahl, Professor of Pathology, University of Kansas, Rosedale, is planning to offer a summer course in general and clinical pathology for students and graduates.

R

The State Legislature has passed the Williamson bill permitting Rosedale to vote \$40,000.00 in bonds to purchase ground for a new hospital site near the present Bell Memorial Hospital.

R

SOCIETY NOTES

STAFFORD COUNTY MEETING

The Society met in Stafford at 8:30 p. m., Wednesday, Jan. 14. Members present J. C. Butler, W. L. Butler, T. W. Scott, W. S. Crouch, Stafford, H. H. Miner, Macksville, W. C. Bundrant, Hudson, L.

E. Mock, J. T. Scott, St. John. Dr. Bauer of Sylvia was a guest of the society.

Dr. Miner of Macksville read a paper on Acute Endocarditis which elicited general discussion.

The President appointed as Censors for 1920 W. S. Crouch, W. L. Butler, T. W. Scott. Dr. W. C. Bundrant, Hudson, will read a paper at the February meeting on "The care of the woman during the puerperium."

At the close of the afternoon meeting the members assembled at the Brinkman Hotel where a chicken dinner was served. The dentists of Stafford were invited and Dr. W. B. Newell attended.

Dr. J. C. Butler was toastmaster and a very enjoyable program followed the dinner.

Society adjourned to meet in St. John the second Wednesday in February at 3:30 p. m.

J. T. SCOTT, Sec.

BARTON COUNTY SOCIETY

The Barton County Medical Society held its regular meeting on the evening of January 14th at Great Bend; thirteen members were present and the subject for discussion was Cystitis. Very interesting as well as scientific information was presented, but the layman's viewpoint of the futility of medical treatment in a case of cystitis handled by one of the doctors present was brought out by the reading of the following letter from the patient's father:

"dere Sir

Enclosed is check for 65 dolers. you can send me draw back check for 25 dolers if you want too. 65 dolers is to mutch. the hospital charge me 75 dolers. Mary got cured at home. everybodis got something to learn. you got something to lern too. we will tell you what we done if you want to no.

(Signed) _____

The doctor stated that no "draw back check" was sent, nor was the professed information requested.

B. S. REMINGTON, Sec'y.

RILEY COUNTY SOCIETY

Gentlemen: The Riley County Medical Society held their annual election January 12, 1920, after dinner at the Gillett Hotel. The following officers were unanimously elected: President, Dr. J. R. Matthews, Manhattan; Vice-president, Dr. J. B. Norman, Riley; Sec-Treasurer, Dr. H. T. Groody, Manhattan; Delegate to state

convention, Dr. G. H. Ross, Manhattan; Censor for three years, Dr. R. R. Cave, Manhattan.

DR. H. T. GROODY, Secretary

COWLEY COUNTY SOCIETY

The annual meeting of the Cowley County Medical Society was held in Winfield on January 15. Twenty one members were present. After the reading of the minutes a clinical case was presented and discussed. Dr. C. T. Ralls read a paper on Vincent's Agina, which was discussed by Dr. Wilmer and by several dentists who were guests of the society. Dr. C. C. Hawke read a paper on "Some Problems in Infant Feeding." The discussion was opened by Dr. Bunten.

Two new members were elected and two applications for membership were referred to the censors. The secretary was instructed to write members who have allowed their dues to lapse.

The following officers were elected for the ensuing year: President, C. T. Ralls, Winfield; Vice-President, E. F. Day, Arkansas City; Secretary-Treasurer, C. C. Hawke, Winfield.

Regular meetings are held on the third Thursday of each month, alternating between Winfield and Arkansas City. The next meeting will be held in the Commercial Club rooms, Arkansas City, February 19.

C. C. HAWKE, Sec.

DOUGLAS COUNTY SOCIETY

At the regular meeting of the Douglas County Medical Society for January, 1920, the following officers were elected: President, Carl Phillips, Vice-President, C. E. Orelup; Secretary, J. R. Bechtel; Treasurer, E. M. Owen; Delegate to State Society, H. L. Chambers.

J. R. BECHTEL, Secy.

R— BOOKS.

Food for the Sick and the Well.

How to Select and How to Cook It. By Margaret P. Thompson, Registered Nurse. Cloth, ix+82 pages. Price \$1.00. Yonkers-on-Hudson, New York: World Book Company.

The housewife as well as the physician and the nurse will find in this volume a valuable help and guide. The text discusses the relation of food to health and the necessity of a balanced menu.

An additional section of the book devotes itself to treatments such as baths, sponges, hot-packs, salt-rubs, poultices, mustard plasters, enemas, douches, and directions for the proper way of filling a hot-water bag.

Modern Surgery General and Operative.

By J. Chalmers DaCosta, M. D., Samuel D. Gross Professor of Surgery, Jefferson Medical College, Philadelphia, Pa. Eighth Edition, Revised, Enlarged and Reset. Octavo of 1697 pages, with 1,177 illustrations, some of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$8.00 net.

A copy of the eighth edition of DaCosta's Surgery has just been received. Most all of the best known of our medical authors have had the same difficulties in the recent revision of their books. In many cases the revision was attempted during the war, when the authors themselves were performing the most strenuous services with the army. Fortunately, however, in this case the author has given us more from his own viewpoint than he would have done had an immense amount of reference literature been easily come by. The book has been enlarged, many chapters rewritten, and many additions made. The discussions are free from unnecessary verbiage, but cover the ground in a very comprehensive manner. The illustrations are numerous and appropriate.

The Surgical Clinics of Chicago.

Volume III Number 6 (Decemebr 1919). Octavo of 215 pages, 63 illustrations and complete index to volume 3. Philadelphia and London: W. B. Saunders Company, 1919. Published Bi-Monthly: Price per year: Paper \$10.00; Cloth \$14.00.

A good many of us will be interested in the first article in this number "Chronic Lung Abscess with Fistula—Treatment by Excision" a clinic presented by Bevan. This is followed by a clinic on two gall-stone cases in which the x-ray diagnosis was positive and confirmed by the operation.

Dr. Daniel A. Orth, St. Mary's Hospital, has a clinic in this number on "Management of Neglected Carcinoma of the Breast." In the clinic of Dr. Emmet A. Printy, Provident Hospital, the technic of Cholecystotomy is carefully presented. Eisendrath has a very interesting clinic and discussion on subacute pancreatitis. Strauss has a clinical case showing the surgical treatment of gastric ulcer. Carl Beck also presents a series of interesting cases. There are also clinics of Harger, Kellogg, Speed, David, Gatewood, McWhorten, Davis, Hasha, Watkins, Moorehead, Woolston and White, Kolischer and Eisendrath, and Kretschmer.

The Medical Aspects of Mustard Gas Poisoning

By Alfred Scott Warthin, Ph. D., M. D. Professor of Pathology and Director of the Pathological Laboratories of the University of Michigan; and Carl Ver-

non Weller, M. S., M. D. Assistant Professor of Pathology, University of Michigan. With 156 original illustrations. Published by C. V. Mosby Company, St. Louis. Price \$7.00.

This book is based upon a series of investigations upon mustard gas poisoning conducted by the pathological laboratory of the University of Michigan. The research extended through a period of eighteen months. The reports that were made at intervals have been gathered together, revised and expanded and to these have been added a chapter on "The Medical Aspects of Gassing in Warfare" and also a complete bibliography of the literature on gassing in warfare. The book is quite profusely illustrated showing the types of lesions produced and their progress.

Syphilis, a treatise on Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment.

By Henry H. Hazen, A. B., M. D. Professor of Dermatology and Syphilology, Medical Department of Georgetown University, and in the Medical Department of Howard University, Etc. With 160 illustrations including 16 figures in colors. Published by C. V. Mosby Company, St. Louis. Price \$6.00.

This is an exceedingly complete and comprehensive work on syphilis. The etiology and pathology are discussed at length. The clinical course is described according to the various stages. Both the early and late cutaneous lesions are described and illustrated. Chapters are given to description of the lesions and of the various structures or systems: Lesions of the nails and hair, of the mouth and throat, of the respiratory tract, of the digestive tract, the vascular system, etc. One chapter is devoted to prophylaxis and the final chapter to treatment.

The Practitioner's Manual of Venereal Diseases, with modern methods of diagnosis and treatment. By A. C. Magian, M. D. Hon. Surgeon Manchester French Hospital; Hon. Surgeon Wood Street Clinic for Genito Urinary Disease. Published by C. V. Mosby Company, St. Louis. Price \$3.00.

This manual gives a concise outline of the diagnosis, symptoms and treatment of venereal diseases, particularly adapted to the needs of the practitioner. After his introduction the author discusses gonorrhœa, its complications, various forms and its treatment. A chapter is given to chancroid. He describes the diagnosis of syphilis, its involvement of various systems, hereditary syphilis and the treatment of syphilis.

The Systematic Development of X-Ray Plates and Films

By Lehman Wendell, B. S., D. D. S. Chief of the Photographic work, Instructor of Prosthetics and Orthodontia, College of Dentistry, University of

Minnesota. Published by C. V. Mosby Company, St. Louis. Price \$2.00.

This book is intended for those engaged in roentgenography and should be interesting and instructive. He discusses methods of development, gives a number of developing formulas, and explains alterations of the negative by chemical means. He describes the tanks, the dark room, the chemicals to be used and finally a chapter on lantern slide making.

R

DEATHS

EZRA ALBERT SCAMMON, M. D., Columbus, Kansas, aged 76, died December 30, from pneumonia. He was graduated from the University of Michigan, Ann Arbor, in 1867.

JOHN PRESSLY LOGAN, M. D., Ottawa, Kansas, aged 77, a graduate of the Medical College of Ohio, 1867, died from cerebral hemorrhage January 1.

R

Lactic Acid-Producing Organisms and Preparations

Fermented milks have long been used because they were palatable to many or because of an opinion among the laity and among physicians that they were advantageous in certain disorders of the gastro-intestinal tract. A great stimulus to the employment of fermented milk was given by the theories of Metchnikoff regarding intestinal putrefaction, which are, however, entirely unsupported by scientific evidence. No one seriously subscribes to his opinions at the present time, but, on the other hand, there is evidence that the administration of sour milk products is at times beneficial. In pediatrics, fermented milk has found a wide application. By the use of acid-producing bacteria, milks of suitable composition may readily be prepared. For this purpose, bacteria of the Bulgarian bacillus group, usually in association with *Streptococcus lacticus*, have been found particularly satisfactory. There is little evidence showing that organisms of the Bulgaricus group can be implanted in the intestinal tract. There is little evidence that liquid cultures of lactic acid organisms are of value as local application to mucous membranes or in arresting putrefaction or suppuration in

wounds, abscesses or sinuses. Liquid cultures of lactic acid organisms, and still more the tablets, deteriorate with age. All such preparations must be stored in an ice-chest and should be marked with an expiration date after which they are not to be used (Jour. A. M. A., Dec. 20, 1919, p. 1887.)

R

Lactic Acid Ferments

In preparing the 1920 edition of New and Nonofficial Remedies, it appeared desirable to the Council on Pharmacy and Chemistry that careful reconsideration should be made of the use in medicine of lactic acid bacteria and products prepared by means of these bacteria—in relation to practical therapy. A special committee consisting of a physiologic chemist (Lafayette B. Mendel, chairman), a pediatrician (John Howland), an internist (W. P. Longcope), a rhinologist (H. I. Lilly), and a bacteriologist (L. F. Rettger) took up the problem. A circular letter was sent by the committee to a large number of well-known bacteriologists, clinicians and manufacturers who might be assumed to have experience or information bearing on the practical use of lactic acid bacilli. Based on the replies which were received, the committee has revised the discussion of "Lactic Acid-Producing Organisms and Preparations" which appears in New and Nonofficial Remedies. These replies showed that the bacteriologists and scientific laboratory workers show far less enthusiasm for the claims of lactic acid bacteria for a place in practical therapy than do the clinicians. It was the general opinion that the Bulgarian bacilli cannot be effectively implanted in the alimentary canal by feeding cultures thereof. The overwhelming preponderance was against the usefulness of cultures of the bacilli in infected sinuses, cavities, etc. The committee recommended that cultures of *Bacillus acidophillus* be not included in N. N. R. at present. The committee considers it important that the Council should continue its control of the viability and purity of cultures offered

for sale (Jour. A. M. A., Dec. 20, 1919, p. 1895.)

R

The Prevention of Simple Goitre

O. P. Kimball, J. M. Rogoff and D. Marine publish their third paper on the effect of sodium iodid in the prevention of goiter in school children. They conclude that simple goiter in man may be prevented and the method may be carried out as a public health measure. Two gm. of sodium iodid given twice yearly seems adequate for the purpose (Jour. A. M. A., Dec. 20, 1919, p. 1873.)

R

Olive Oil as a Laxative

In order that digestible oils may act as laxatives, it is necessary to give more than can be digested and absorbed. In the case of an infant, this may be one or more tea-spoonfuls daily, beginning with small dosages and increasing them until the desired effect is obtained. For adults, one or two tablespoonfuls may have to be given three times daily, either an hour before meals or two hours after meals. Olive oil may be taken mixed with hot milk or floating in fruit juice. Olive oil might be particularly serviceable in spastic constipation in an emaciated individual. The use of olive oil as a laxative would be contraindicated in obesity, diabetes, gastric atony and in hypochlorhydria, as well as in those inclined to biliousness.—Journal A.M.A., November 8, 1919, p. 1441.

R

The Importance of the Rural Hospital

The importance of the rural hospital to the rural community—and not only to the rural community but to the urban as well, for the health of the farmer is necessary for the feeding of the nation—is set forth in a study of conditions in rural hospitals, appearing in The Modern Hospital, Chicago.

The first thing to ask of any hospital is not whether it conforms to this or that specific requirement, but whether, in view of the sum of its services to the community, it deserves to exist. Would the community be better off with or without it?

Many a rural hospital which would make a very poor comparison with the average city hospital is yet indispensable to the well-being of its community. Such hospitals need not to be suppressed but to be helped.

A general study of several communities has brought out the fact that the health and hospital problem of a small community is often rendered exceedingly complex in proportion to population by the multiplication of small hospitals. Often certain classes of cases are not adequately provided for. In many places the community has not learned to rely on the hospital as much as it should. The rural hospital really has a field of its own and a function distinct in many ways from that of the urban hospital.

R

C. Legiardi Laura (prelim, communication N. Y. Med. Jour., Nov. 1) claims some promising results in diabetes with an anti-pituitary serum prepared by immunizing the horse with extract of posterior and infundibular pituitary. The author reports thirty cases of diabetes mellitus. In fourteen of these cases there was complete disappearance of sugar from the urine while the intake of carbohydrates was notably increased. In eight cases there was diminished glycosuria. It was also observed that the administration of the serum caused a considerable fall in blood pressure.

R

The Patenting of New Therapeutic Agents

Enterprising pharmaceutical manufacturers have usually been ready to appropriate the results of scientific research by investigators or therapeutic measures suggested by practicing physicians. Not infrequently, in such cases, the desire for financial gain has caused the marketing of such products with extravagant, if not false, claims as to their value. Therefore, though it is unethical for physicians to receive remuneration from patents on medicines or instruments, it is important that new therapeutic agents discovered in our research institutions be protected by patenting them and thus to so control them that they may be available without subordination to commercial interests. In 1914, the House of Delegates of the American Medical Association passed a resolution to the effect that the board of trustees of the Association should accept at its discretion a patent on a medicine or surgical instrument, as trustee, for the benefit of the profession and the public, provided that neither the Association nor the patentee should receive remuneration for this patent. The Rockefeller Institute for Medical Research has solved the problem in a similar manner. Certain products discovered there have been patented. It is

proposed to permit the manufacture of such discoveries under license by suitable chemical firms and under conditions which will insure the quality of the drugs and their marketing at reasonable prices. It is further announced that the Institute will not receive any royalties or pecuniary benefits from the licenses it issues (Jour. A. M. A., Oct. 18, 1919, p. 1219.)

R

Acriflavine and Proflavine

Tentative descriptions and standards for acriflavine and proflavine are published in New and Nonofficial Remedies for the information of manufacturers, pharmacists and physicians. In view of numerous inquiries regarding the therapeutic properties of these dyes which have been received by the Council on Pharmacy and Chemistry, the Council has prepared an abstract of the available literature on the subject. From this review it is evident that the use of the dyes is in the experimental stage and that their value cannot be definitely judged. Of the thirty-four reports which are abstracted, twenty-five may be considered as favorable; seven are distinctly unfavorable, and two are in the doubtful class.—Journal A. M. A., November 15, 1919, p. 1542.

R

Medinal

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R

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VERONAL SODIUM.—A brand of barbital sodium complying with the N. N. R. standards. For a discussion on the actions and uses of barbital sodium, see New and Non-official Remedies, 1919, p. 83. The Winthrop Chemical Company, Inc., New York.

PROCAINE-CALCO.—A brand of procaine complying with the N. N. R. standards. For a discussion of the actions and uses of procaine, see New and Nonofficial Remedies, 1919, p. 30. The Calco Chemical Company, Boundbrook, N. J.

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MERCUROCHROME-220.—A preliminary report of the Council on Pharmacy and Chemistry discusses the experimental status of this new germicide for use in the genito-urinary tract. While the lack of confirmatory evidence of its value does not permit more than a tentative acceptance, the available data may be sufficient to warrant its use by physicians, provided its experimental therapeutic status is recognized. Mercurochrome-220 (marketed by Hynson, Wescott and Dunning, Baltimore) is stated to be dibromo-oxymercury

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THE JOURNAL of The Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, MARCH, 1920

No. 3

The Role of the Laboratory in the Diagnosis of Venereal Disease

BY WILBUR A. BAKER, M. D., ROSEDALE

Read at the Annual Meeting of the Kansas Medical Society held at Kansas City, Kansas, May 1, 2 and 3, 1918.

I believe that it is more important in venereal disease work than in any other branch of medicine for the clinical man to have some general knowledge of the various laboratory procedures which he utilizes in making his diagnosis. A great many misunderstandings have arisen in the past between the practitioner and the laboratory man and a large number of these have been due to the fact that the practitioner does not appreciate the limitations of the various tests employed. It cannot be emphasized too strongly that it is the man who examines the patient who makes the diagnosis and not the man who makes the laboratory tests. Since this is the case it is necessary for the clinician to have some knowledge of the tests employed and their limitations, for otherwise they are apt to be more misleading than helpful to him.

THE DIAGNOSIS OF GONORRHOEA. I know of no other disease in which the laboratory evidence is quite so unsatisfactory as in this most prevalent of all diseases. The laboratory methods of procedure in this disease are (1) the complement fixation test, (2) examination of smears from the genitalia, and (3) the making of cultures from the genitalia.

The complement fixation test for gonorrhoea has not been sufficiently developed as yet to be of much value. The extreme difficulty in preparing a satisfactory antigen is one of the greatest stumbling blocks

to this test. Very few laboratories as yet are offering it as a diagnostic test.

The examination of smears is probably the most popular laboratory test for gonorrhoea. However it is impossible to say positively from the examination of a stained smear that the organism at hand is the gonococcus. If the organism is a diplococcus and is found within the pus cells one is fairly safe in assuming that it is the gonococcus. The gonococcus also has a habit of grouping itself around the pus and epithelial cells which is more or less characteristic, but by no means pathognomonic. The Gram stain cannot be too greatly relied upon for it is none too trustworthy, even in the hands of experienced workers. The morphology of the gonococcus is so variable and there are so many organisms, especially around the female genitalia, that resemble it that one cannot count too much on morphology.

I mention some of these points merely to give you some idea of what the bacteriologist is up against when the practitioner sends him a smear and asks to be told whether or not his patient has gonorrhoea. Of course the bacteriologist can only say whether or not he has found an organism that resembles the gonococcus, and the practitioner must couple this report up with the clinical findings and make his own diagnosis. The value of the smear is largely dependent on whether or not it is properly made. This is especially true in the female. It has recently been shown by Warden and others that the gonococcus is an extremely delicate organism, which is very rapidly broken up by changes in the

osmotic pressure of the surrounding medium. This probably accounts for the fact that the organism is so seldom found in the examination of vaginal smears. All smears from the female should be taken directly from the cervix and urethra. Even then the percentage of negatives in the chronic cases will run very high.

The making of cultures is of course the ideal method for identifying the gonococcus but unfortunately the organism is so hard to grow that this requires the services of a skilled bacteriologist. There are so many difficulties attending this method that it is impracticable, as a clinical procedure. When all is said and done, the part played by the laboratory in the diagnosis of gonorrhoea is a rather minor one.

LABORATORY TESTS FOR SYPHILIS. The only truly specific test for syphilis is the demonstration of the spirocheta pallida with the darkfield illuminator. The use of this test is of course limited to those cases in which there are surface lesions that can be examined.

COMPLEMENT FIXATION TEST. Probably the most widely used and one of the most valuable of all laboratory tests is the complement fixation test for syphilis. It is also probably about the least well understood by the medical world in general. Before the advent of the Wassermann reaction syphilis was generally recognized as a skin disease, very little being known of its visceral manifestations. Undoubtedly the greatest incentive to the study of syphilis has been the Wassermann reaction and a great many more cases of syphilis would go undiagnosed today if it were not for this most valuable test. We must not, however, allow the merits of the test to make us forget entirely its limitations. The Wassermann test is by no means a specific one. It is merely a biochemical reaction which we know takes place when the blood serum of certain individuals is incubated with certain reagents. These reagents are called antigen and complement. The antigen in most common use today is an alcoholic extract of normal heart muscle, with or without the addition of cholesterol. The fresh

blood serum of the guinea pig is usually used as complement. We know from experience that fixation of the complement takes place in certain diseases and conditions, the principal of which are syphilis, certain liver conditions, the toxemias of pregnancy, and certain febrile conditions. Some workers have claimed that as high as 10.7% of pregnant women show some fixation of complement in the Wassermann test, which phenomenon promptly disappears after the termination of the pregnancy. The essential difference between the complement fixation found in syphilis and in other diseases seems to be one of degree. The Wassermann test therefore resolves itself into a quantitative one, which point is a very important one to remember in the interpretation of results.

One of the greatest arguments that has been used against the Wassermann test is the variability of results obtained in different laboratories, and even in the same laboratory.

VARIATIONS IN DIFFERENT LABORATORIES. I don't believe that there is any other class of men that have such a tendency to disagree, both as to methods and conclusions, as men of the medical profession. Very rarely can one find two surgeons who use exactly the same technic in the performance of a given operation. Now and then one finds two internists who can agree on the diagnosis in a difficult case, but such is the exception rather than the rule. Laboratory men are by no means an exception to this rule.

As yet nobody has ever devised a perfect technic for the complement fixation test. The Wassermann technic, the Noguchi technic, and all the various modifications of these have their weak points. Almost every man who does the test has added some minor modification or refinement in attempt to either simplify it or make it more efficient. Some of these modifications have really made the test more efficient, but many of the attempts to modify it so as to make it available to the practitioner in his office have been rather disastrous.

In 1915 a committee was summoned by Dr. Haven Emerson, Commissioner of Health in New York City, to consider the whole question of the reliability of the Wassermann reaction and to attempt to standardize the technic. This committee was composed of serologists in charge of Wassermann laboratories in large New York institutions. Their many discussions might well be compared to those of a group of alienists trying to agree upon a diagnosis. Hardly any two of the dozen members of the committee agreed precisely in the technic for any single step in the test.

It is impossible to discuss here the many possibilities for variation in different laboratories, but one of the greatest chances for variation is in the antigen used. It would be impracticable for the clinician to become acquainted with the various kinds of antigen that are in use, but there are two kinds of antigen of which he should have some knowledge. These are the plain alcoholic extract and the cholesterinized antigen. The cholesterinized antigen is usually prepared from the plain alcoholic extract of normal heart muscle by adding cholesterol to saturation. If one disregards the weaker positives (1 plus and 2 plus) the difference in these two antigens will be only about five per cent, the cholesterinized antigen being the more sensitive. There are a few cases, however, that give a stronger reaction with the plain antigen. If one considers the weakly positive reactions (1 plus and 2 plus) the cholesterinized antigen gives a far greater number of weak positive reactions in cases of treated syphilis, but it also gives quite a number of weakly positive reactions in cases in which no other evidence of syphilis can be found. For this reason weakly positive reactions with a cholesterinized antigen have a very limited value for diagnosis. I believe that it is in following the progress of a case under treatment that the cholesterinized antigen enjoys its greatest field of usefulness. It is also of great value in those cases that give a very weakly positive test with the plain antigen. When the plain antigen is entirely negative, however, and the chole-

sterinized antigen shows positive one should regard the report with considerable suspicion. On the other hand spurious fixations are extremely rare with the plain alcoholic extract antigen. I believe then that one should give to the cholesterinized antigen the veto power, depending on the plain antigen for evidence to convict. Certainly no Wassermann test is complete unless both antigens are used.

VARYING REPORTS FROM THE SAME LABORATORY. There are certain variable factors in the Wassermann reaction which it is impossible for the serologist to control, no matter how careful and painstaking his technic may be. In 1910 Craig published a series of tests run on ten prisoners, all known syphilitics, in the prison at Fort Leavenworth. Blood specimens were taken on these prisoners every day for seven days, no treatment being given them during this time. These bloods were tested each day, usually the same day that they were taken. Most surprising variations were noted in the reports on some of these bloods from day to day. Craig attributed these variations to changes in the antibody or fixing substances in the patients' serum from day to day. There was one factor, however, that he seemed to entirely overlook, i. e. that each man's blood was run against seven different hemolytic systems. Thus in his reports he showed the sum total of the variation in the patient's serum and the variation in his hemolytic system from day to day. If he had saved all the specimens from each man and run them all on the same day, against the same hemolytic system, he might then have attributed any variations in results to changes in the patients' serums. This work of Craig's opened up a field for subsequent investigation, however, and it has been pretty definitely shown that there are certain variations in the complement-fixing substances in a patient's serum from day to day.

Every day that Wassermann tests are run one must have a fresh supply of complement taken from different guinea pigs. We are able to titrate this complement for its hemolytic powers but not for its "fix-

ability". The complement from one guinea pig may be much more amenable to fixation by human serum than that from another pig. Since we cannot titrate this "fixability" of the complement, we pool the serum of several guinea pigs, hoping in this way to strike some sort of an average. We then have these two variable factors in the test which are not within the power of the serologist to control, i. e. certain variations in the fixing substances of the patient's serum, and the variations in the hemolytic system from day to day.

Fortunately, however, for the diagnostic value of the test practically all of these variations occur only in the weakly positive zone, i. e. the one plus or two plus test. This is also true of spurious fixations. This may well then be called the doubtful zone.

THE VALUE OF THE TEST. What the clinician is mostly interested in is just how much reliance can be placed on the Wassermann report. In other words, how efficient is it as a means of diagnosis? Unfortunately it is impossible to gather from the literature any very definite statistics along this line. Most of the men who are bold enough to give figures give little or no idea of the technic they have used in the test, do not tell the degree of fixation in the various cases, and last but not least they do not give any definite standards by which they have established the presence or absence of the disease. Making a clinical diagnosis is one thing, but confirming this diagnosis by actual pathology found at autopsy is quite another matter. There is one positive statement about the Wassermann test, however, that I feel quite safe in making. If a patient gives a 4 plus Wasserman test with a plain alcoholic extract antigen, the test being properly done, that patient has syphilis. I believe that this is the one Wassermann reaction that is in itself diagnostic and requires no clinical evidence to confirm it. In the absence of clinical evidence however one should confirm this report with a second specimen since the possibility of a technical or typographi-

cal error on the part of the laboratory must always be borne in mind. A 3 plus Wasserman is of great diagnostic importance, although not absolutely conclusive in itself. The weaker positives are of practically no value in differential diagnosis. They should be considered as positive in known cases of syphilis that are on treatment, and in those cases where all the clinical evidence points toward syphilis.

A negative Wassermann by no means excludes the possibility of syphilis, since there is no stage of syphilis that gives 100 per cent positive Wassermann. There is considerable variation in the figures given by different workers, as one might expect when he considers the variations in the test and the different standards of diagnosis. However I believe the following figures to be a fair estimate of the percentage of positives in known cases of syphilis.

Primary 50 to 90% depending on age of lesion.

Secondary 90 to 98% depending on age of lesion.

Tertiary 70 to 80%.

Latent 40 to 50%.

Paresis 90 to 98%.

Tabes 60 to 70%.

THE EFFECT OF TREATMENT ON THE WASSERMANN TEST. The administration of small doses of arsphenamine tends to make a weak reaction stronger, and in some cases will even make a negative case become positive. This fact is made use of in the so-called provocative tests. The test usually shows strongest at about the fifth to the seventh day after administration of the arsphenamine. This test is very useful in the diagnosis of tertiary or latent cases.

The administration of mercury and the iodids tends to make the Wassermann become negative, independently of the success of the treatment. By the administration of large doses of mercury intravenously I have caused frankly positive cases to become negative in as short a space of time as two weeks. If the administration of mercury is stopped as soon as the Wassermann becomes negative these cases be-

come positive again in a length of time varying from ten days to eight weeks.

POINTS TO BE OBSERVED IN OBTAINING BLOOD FOR THE TEST: If the best possible results are to be had there are certain points which the practitioner must observe when obtaining the blood.

1. All glassware should be either dry or rinsed with sterile normal saline. Chemical contaminations should be carefully avoided.

2. Sterility. Containers must be sterile, especially when sending blood from a distance. Bacterial contamination usually causes the serum to be anticomplementary so that it cannot be tested.

3. Blood taken a short time after the patient has eaten is apt to be chylous and anticomplementary. Bloods should not be taken within 3 hours after a meal.

4. The ingestion of alcohol tends to make a positive blood negative. This effect may last for as long as 24 to 36 hours.

Ether or chloroform anaesthesia is apt to cause a false positive. Bloods should not be taken within 48 hours after the patient has had a general anaesthetic.

THE COLLOIDAL GOLD TEST. The colloidal gold test is one of the most valuable that we have for the diagnosis of paresis. Complete decolorization of at least the first two or three tubes of the series is found in practically 100% of these cases. This test is of especial value in detecting paresis in its very early stages. In the diagnosis of other forms of cerebrospinal syphilis, however, it has a much more limited value. A great many normal spinal fluids will give mild gold changes in the so-called cerebrospinal lues zone.

This paper has not been presented with the idea of giving you anything new. Its object has been merely to emphasize the fact that the laboratory has its limitations, and that it is necessary for the clinician to have some knowledge of these limitations if he is to derive the greatest possible benefit from its use.

Some Considerations in the Treatment of Purulent Appendicitis

T. A. JONES, M. D., HUTCHINSON

Read at the Annual Meeting of the Kansas Medical Society held at Kansas City, Kansas, May 1, 2 and 3, 1918.

This is of course a hackneyed title. Appendicitis is a hackneyed disease. Nature in so ordering the incidence of diseases forgot that she had endowed us with a taste for novelty. Some diseases recur to us in a tiresome proportion. Addison's disease and erythromelalgia are tidbits. Pneumonia and appendicitis are the bread and milk of our everyday fare. The great leader of the profession and the research man may gratify this taste with experiment and original observation but we practitioners of the rank and file must be reconciled to a humdrum routine. Since nature has apportioned appendicitis such a prominent place in our practice we must accord it the same prominence in our studies.

Neither is it worth our while to loiter with the customary apology for the term purulent. We know that people are dying every day from appendicitis and the deaths are due to suppuration. Several days are needed for progress to the suppurative stage and in this ample period the diagnosis should be established and the appendix cut out. This is not always done and there are a number of reasons. Sometimes the patient will not take our advice, fortified in his resolution by the sophistry of irregular cults he holds out against us to the eleventh hour. Another source of procrastination is the tender hearted family doctor who does not believe in surgery. He protects his favorite patients (and his patients are all his favorites) from the bloody knife and rabid haemostat of the surgeon. And further with humility let us confess that it is sometimes from lack of diagnosis. The popular practitioner and the celebrated surgeon cannot spare the time to hang over a patient's bed for a history or peer through the microscope for a leucocyte count. Before even the profession can do its part in this critical disease the practice of diagnosis must be regenerated.

Confronted then with an emergency in which an inflamed appendix has been neglected to the suppurative stage, regard for the patient's life and health makes certain steps imperative. The abdomen must be opened at once. Do not move the patient or wait to get ready. Delay is more dangerous than lack of operating paraphernalia. The operation must be shortened to the extreme. The minimum of shock must be superimposed on the toxæmia. The poisoned heart must be relieved by immediate and thorough drainage of all pus cavities. If the patient survive the crisis it is well to have provisions against complications and the risk of a second attack.

One method of operation may now be outlined. Give a preliminary injection of morphine and atropine. Make a long diagonal incision from a point in the middle line nearer the pubis than the navel, extending far out over the anterior superior spine of the ilium. Incise between the fibres of the external oblique muscle and separate them with the index finger of each hand from the outer end of the skin incision to the point where they merge into the anterior sheath of the rectus muscle. In the same way incise and separate the fibres of the internal oblique and transversalis jointly till the border of the rectus is reached. Then continuing the traction on all three muscles tear across the anterior sheath of the rectus almost to the middle line. Displace the deep epigastric vessels and the rectus inward and insert retractors. If not sufficient the rents in the muscles and aponeuroses may be extended outward till an area of peritoneum the size of the palm is exposed. Incise the peritoneum watching for adhesions to the bowel. If the omentum presents loosen it gently from without inward and expose the bowels. Beginning with McBurney's point search for the node of maximum induration separating adhesions everywhere by a sort of sawing motion of the index finger tip. If the location of the appendix is not at first clear persist until its characteristic indurated feel stands out. Shell out the appendix from either end and tie in any way to

make sure of the viscus and the artery of the mesenteriolum. Insert a five-eighths inch stiff rubber tube with a couple of fenestrae to the bottom of the pelvis and another 3 inch tube 4 inches long outside the cecum into the right kidney pouch. If blood oozes pack the bed of the appendix, the gauze to be removed in 24 hours. Tuck the omentum around the drainage tubes fastening it with small catgut over any necrotic area of bowel. Close peritoneum with a continuous suture drawing the tubes to the outer end of the incision. Approximate the borders of the rents in the muscles and aponeuroses and repair the sheath of the rectus with a single catgut suture including the rectus at its outer border. Reunite the borders of the internal rectus and transversalis jointly with a single suture just internal to the protruding drainage tubes. Close the rent in the external oblique by a suture or two on either side of the tubes. The skin may be closed in any way convenient.

Sometimes under special conditions it may be necessary to admit one or more of the following variations. If the patient is moribund the abdomen should be opened under local anaesthetic and drained without searching for the appendix. Sometimes under general anaesthesia a failure of the patient's strength may require a difficult enucleation to be abandoned. If the induration of the bowels indicates that the situation of the abscess is abnormal the location of the incision may be varied accordingly. When the distention is enormous it may be best to anticipate nature's fecal fistula by draining the cecum through the stump of the appendix or by an enterostomy.

IMPORTANT CONSIDERATIONS. All muscles and aponeuroses should be split, not cut, because splitting can be done rapidly with the fingers and the closure requires few sutures. Also retraction of the intact fibres will close a fecal fistula or prevent a postoperative hernia. The tear in the sheath of the rectus should be below Douglas' fold. The elimination of the posterior sheath of the rectus from the incision gives more room and otherwise simplifies the op-

erative technique. Get the appendix if possible. Opening up the focus of absorption helps to relieve the immediate toxæmia and prolonged suppuration and the risk of a second attack are avoided. Do not invaginate the stump. This prolongs the operation and gains nothing in an infected field. Make no stab drainage wounds. They only add trauma. The peritoneal cavity will drain through any length of tube if the lumen is free. The pressure in the peritoneum is positive, not negative as in the pleura. Let the drainage tubes emerge as far as possible laterally so that when adhesions occur they will involve the head of the cecum instead of the ileum and not obstruct the fecal current. And most important of all drain the whole peritoneal cavity and not the local abscess cavity alone. Theoretically there may be an interval in which the abscess cavity is walled off but systematic investigation of the pelvis proves that this interim is too short to be trusted. The object is not to respect the walls of the abscess cavity but to break through and carry the drain to the bottom of the pelvis. Break up adhesions in all directions. Adhesions interfere with drainage and immediate drainage is necessary to save the patient's life. Complete drainage is also the best safeguard against secondary abscesses.

AFTER TREATMENT. Give plenty of water first by the bowel testing the tolerance of the stomach as soon as the patient wakes. If the drainage is free it is surprising how soon the stomach will hold water plentifully. If the stomach refuses resort must be had to the rectum again or to a vein. Keep the patient in the Fowler position. This allows the pus to gravitate to the pelvic drainage tube. Ausculate for peristalsis frequently and if it is not present give pituitrin in full doses. If the loops of bowel are still the pus accumulates between them and the peritonitis extends. This also constitutes a reason for withholding opiates.

RESULTS. These observations are founded on more than two hundred frank pus cases, in all stages from the incipient rupture to

advanced general peritonitis with barrel belly, cold extremities and the Hippocratic facies. They have all been handled according to the above principles and there have been two deaths. Both fatal cases showed definite gangrene of the bowels at operation and it was not possible to provoke peristalsis. Of course there have been complications. In six cases the appendix had to be left. In one case there was recurrence of the general peritonitis after healing had shut off the pelvic drain from the main peritoneal cavity. This case recovered after the insertion of a suprapubic drain. Two cases had early obstruction of the bowels. Both recovered after a median line incision drawing away from the drainage sinus the adherent kinked loop of the ileum. Two cases had empyema, both recovered after resection of a rib. Both were in children. The larger number of these cases have escaped from observation but so far as known late complications have been few. Immediately after the operation we have had many cases of fecal fistula. This complication is ignored as natures safety valve for the intestinal toxæmia. No case has persisted to require operation. Many cases have had more or less chronic abdominal discomfort, presumably from adhesions, but no case of serious obstruction of the bowels has returned to us. A few cases have passed from observation with a slight discharge from the drainage sinus. One case of this sort returned to the hospital eight months later to die of a subphrenic abscess which he refused to allow to be completely drained.

SUMMARY. Appendicitis kills in most all fatal cases from the resulting general peritonitis. This peritonitis like any other abscess shows a marvelous tendency to recover when properly drained. The immediate saving of life resolves itself into removing the obstacles to drainage. The whole peritoneal cavity must be drained. The prognosis is good so long as the bowels are alive and capable of peristaltic movement, and generalized adhesions throughout the abdomen have not confined the pus in multiple sacculations. Occasional deaths

are inevitable but patients die chiefly because the surgeon overlooks pus in the pelvis. Other fatal errors are to miss the appendicular artery or kink a loop of ileum with a drainage tube or suture. Properly placed muscle splitting incisions will in most all cases prevent late complications without in any way interfering with immediate life saving treatment. Since surgeons sometimes condemn a patient to death without operation I want to close with this assertion. There is no way to prove that a patient is beyond hope with general peritonitis. It is never too late to drain.

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The Need of a New Type of Graduate Study in Schools of Medicine

BY C. FERDINAND NELSON, PH. D., M. D.

Professor of Biological Chemistry, School of Medicine,
University of Kansas

That Medicine in its various phases is today advancing by leaps and bounds requires no lengthy or detailed discussion. One need but consult the volumes of the Index Medicus or scan the pages of the Quarterly Cumulative Index to Medical Literature to appreciate the tremendous strides that the laboratory and clinical sciences are taking with each succeeding year and indeed with each month that goes by. There is appearing today such a wealth of material, certainly in detail if not in fundamentals, that even the energies of the specialist are taxed to keep abreast of the times in however small and restricted a field he may be working. To the average busy practitioner, steeped in the minutiae of a hundred immediate and perplexing duties, seldom if ever offered an opportunity to visit a medical center and never permitted to do laboratory work of any sort, this vast array of new knowledge is well nigh staggering. He knows neither where to begin nor end his inquiry for new truth. He is aware that all that appears on the printed page is not of equal value, but he has neither the time nor does he possess the varied and particular training necessary to choose that which may possess merit and worth from that which is hasty and super-

ficial. If he thus reads at all he probably attempts to read a bit of everything; in the end he finds he gets really nothing. He needs to have bridged the chasm which separates the knowledge of his own undergraduate days from the information of the present. If this can be accomplished in a rapid and orderly fashion, the net gain to the general advancement of modern medical practice and public welfare will be tremendous. Many of our medical schools have the location, equipment, and with suitable modifications, the facilities to vitally serve the profession in this capacity.

Graduate study, as the term is usually used, implies rigorous concentration on some specific problem or phase of work for a considerable period of time and includes experimental research of one sort or another. The main business of the regular graduate student has been and should continue to be the widening and enlarging of human knowledge. This idea must, of course, always remain the ideal and central thought of graduate study and one to be particularly insisted upon when recognition in the form of academic advancement or higher degrees is sought. There should be no lessening of experimental inquiry or any abandonment of this phase of graduate activity, for in this lies the very heart of medical progress and advancement but room should also be made for efficient, orderly and rapid dissemination of the results of research for graduates in medicine who are desirous to bring themselves abreast of the times in any or all of the laboratory or clinical medical subjects. There is coming to be more and more justification, a demand even now exists, as yet largely latent to be sure, but easily discernible, for post graduate work in medicine which rather than being research is essentially in the nature of review, the entire time being spent and emphasis wholly directed to the task of acquiring a mastery of the best of modern research, theory and laboratory method together with their bearing on problems in general practice.

No more wholesome or far reaching ad-

vance could happen to our professional life than to make it possible for the rank and file of medical men, every now and then, to re-enter University halls there to pursue, as graduate students for short periods, courses especially designed to review the best and latest medical thought and practice and thus to permit physicians generally to acquaint themselves with the medical advances which their own busy lives now make it impossible for them to get. The idea that an undergraduate course once completed, a diploma once earned, forever ends further college study tremendously hinders and retards real medical progress. A progressive science never ceases to unfold or to enlarge its boundaries; practical as well as theoretic details are always forthcoming which physicians, more than any other professional men, need early to master. To have facts sifted, arranged and presented by men who devote themselves exclusively to some one phase of medical study is not only the most economical way of acquiring information, it is by far the best, safest and most vital procedure possible. The specialist quite generally avails himself of the opportunity of post-graduate study in the form of laboratory work, advanced reading, or operative technique at some university or large hospital. There is quite as much or even more reason for similar practice on the part of the general practitioner.

There is ample evidence that the active practitioner really is anxious to leave his practice now and then, to come back to a medical center for new inspiration and training. The clinic of any well known surgeon testifies to this fact. Many men make it a habit annually to "lay off" for a week or two or even for a month to visit larger hospitals, to see men of reputation operate and to "pick up pointers" for their own work. Many physicians come back regularly to their alma mater and enter the clinics and dispensaries with undergraduate students merely to get the chance to "brush up" a bit. If the time thus spent could be devoted to systematic study rather than to a desultory running about from

place to place, something a great deal more worth while might be accomplished. If courses in the various medical subjects, designed exclusively for graduates in medicine could be regularly scheduled throughout the year in at least the larger of our medical schools there seems little doubt that the profession would not take advantage of them and attend in considerable numbers. The practice once started would grow until it became an established necessity, beneficial alike for doctor and public.

No one will deny that to educate some thirteen thousand young men and women to become worthy practitioners of medicine, which is the present task of our eighty odd medical colleges, is a worthy and probably sufficient public duty for them to perform. For most of them the task is probably all that can be expected. But the educational process cannot stop here in as progressive a science as medicine. The medical educator must clearly perceive that men in front line trenches must of necessity come behind the lines now and then for rest and mental rehabilitation. Nothing is so conducive to keeping men fit and active, few measures can be productive of more public good. Tremendous as the task may seem, the privilege of helping to stimulate and re-equip at least the willing fraction of a hundred and fifty thousand men already in practice should be accepted and work begun. Perhaps, state and governmental aid could be secured to make possible the successful beginnings; the opportunity for public service along these lines should not longer be postponed.

The larger cities undoubtedly furnish the best locations for graduate clinical and laboratory review. Here are found the largest number of surgeons and internists of eminence, dermatologists, rhinolaryngologists and men of the other specialties. Here also is to be found an abundance of clinical material especially adapted to graduate study. Moreover the large city furnishes recreations and accommodations that appeal to older men and makes a period of freedom from active practice a vacation as

well as a profitable undertaking. With the gradually increasing realization that clinics of sufficient size and with ample range of disease for undergraduate demonstration may be built up, even in small cities, from a class of our citizens who not only can furnish the beginning student with an intelligible history but also is available for far better "following up" of a case and that undergraduate training is best fostered under immediate University supervision and in contact with students of the Arts, Sciences and other professions, it may be possible and profitable to convert certain equipment and plants now devoted to undergraduate work exclusively to graduate review. The University of Chicago has already decided to move its undergraduate school to the University campus, the present buildings to be remodeled and enlarged and used for graduate study. What the nature of this work is to be has not yet been announced. Surely the unfortunates who now inhabit the slums and congested districts of our large cities, in whom disease at its worst is seen and who now come to our dispensaries, pointing to a spot of an aching body with an articulate "Boli" as a sole explanation, are the very material for the mature student to cope with. Here advanced medicine can best be learned or the results of recent research demonstrated. The specialist and graduate can here do good and find each other mutually helpful.

Celebrates Thirtieth Anniversary

The Thirtieth Anniversary of the founding of The Abbott Laboratories is being celebrated this month. This firm has recently established the precedent in the pharmaceutical field of placing their employees on a profit sharing basis.

It is a notable fact and one worthy of commendation that more new medicinal chemicals, and council-passed products have come from the house of Abbott during the past five years than from any other firm in this country.

Beware bootleg liquor, warns the United States Public Health Service, for much of it contains wood alcohol and other poisons. An ordinary swallow of wood alcohol may produce death or blindness.

BELL MEMORIAL HOSPITAL CLINICS

Clinic of Dr. Thos. G. Orr

Department of Surgery

FRACTURE OF NECK OF FEMUR

This patient (Hosp. No. 8858) is 42 years old. She was admitted to this Hospital January 22, 1920, with a history of injury to the right hip. Six weeks previous to admission, while lifting a heavy piece of wood to put it on the fire, she fell and struck her right hip on the floor. The fall was very probably caused by the spasticity in her left leg which is the result of an old hemiplegia twenty-two years ago. It is very evident from the history that she gives that the injury was due to direct violence. During the six weeks before admission here she suffered a great deal of pain in the hip. The only treatment that she had was the application of liniment. She was told that she had a sprain.

When examined here this patient presented the ordinary signs and symptoms of fracture of the femoral neck. She had pain on motion, marked disability, shortening of the right leg and external rotation. The x-ray showed a fracture of the neck near the head with complete separation of the fragments.

The type of fracture presented by this patient is really quite easy to diagnose because it has the typical deformity. If impaction had taken place at the time of the injury there might have been more difficulty in making a definite diagnosis. However, with the shortening that almost invariably occurs with complete fracture of the femoral neck, the character of the injury can usually be determined without difficulty. But you will find that an error in diagnosis is not infrequently made. Less than three weeks ago a man of sixty walked into our Out-Patient Department on crutches with a fractured neck of the femur which had been called a sprain and treated with liniment. There may be a good excuse for not being able to diagnose a fractured hip, but there is certainly very little excuse for not suspecting it in severe hip injuries.

You will remember that there are two chief types of fracture of the neck of the femur; fracture through the neck, which is often wholly intracapsular, and fracture at the base of the neck which is extracapsular. It is important to determine which type you are dealing with because the fractures at the base of the neck usually unite with bony union regardless of the method of treatment, while those through the neck often fail to unite.

We shall chiefly concern ourselves today with the treatment of fractures at the hip. You will see that this patient is being treated by the Whitman method of extreme abduction. Before attempting this treatment the patient is anaesthetized. She is then placed on a Hawley table, which table, to my mind, is one of the most important fairly recent contributions to the treatment of fractures. It is almost ideal for the application of plaster spicas in these hip cases. The thigh is first flexed to a right angle and rotated to free the fragments of any tissue that may lie between them. These movements are followed by extension, traction and abduction to the anatomical limit. After the leg is extended strong traction is made with the patient on the table placed firmly against a perineal pad. Both extremities are abducted to the anatomical limit; first the sound and then the injured. While the patient is being held in this position on a pelvic rest a plaster spica is applied from the toes to just above the costal margin. If the plaster is fitted snugly about the pelvis it is not necessary to extend the spica down the sound thigh to maintain abduction. Great care must be used in padding the bony prominences. We use saddle felt over the knee, both ilii, sacrum and along the costal margin opposite the injury. Plaster dressings cannot be applied too carefully. A properly applied spica is not uncomfortable, the appearance to the contrary notwithstanding. The restraint necessary for the fixation of the bony fragments is necessarily somewhat tiring but by no means unbearable. Any restraint in these cases, especially the aged, of course has its

drawbacks. During the application of the plaster the extremity should not only be carefully kept in extension and extreme abduction but external rotation should be avoided. This can be done by holding the limb in the proper position and carefully lifting and building up strongly with plaster beneath the trochanter of the fractured side.

When the Whitman spica is put on, that does not, by any means, end the treatment of fractured hip. The patient should have constant surveillance both by nurse and surgeon. The head of the bed should be raised and the patient turned over in bed daily for a short time to prevent lung congestion. Pressure points should be watched for and irregularities in the cast trimmed out to prevent sores and to make the patient more comfortable. If a constant burning pain or ache is complained of at one point it should immediately be investigated and remedied, for it means pressure and will eventually result in necrosis of the skin and ulceration if neglected. Ordinarily the spica should not be removed for seven or eight weeks.

It may interest you to know the reasons why the Whitman method is used in the treatment of this and other cases. Not long ago I heard one of America's foremost orthopaedic surgeons say that the Whitman method of treatment of fractures of the neck of the femur was almost as important a contribution to fracture surgery as the Jones position in fractures in and about the elbow. That is a strong statement, but, I believe, not far from the truth. In complete anatomical abduction the outer portion of the neck rests against the edge of the acetabulum or the trochanter against the ilium. In this position the muscles attached to the trochanter are relaxed, the capsule is put on the stretch, which aids in splinting the fragments, upward displacement is prevented by the neck against the acetabular edge or the trochanter against the ilium and the ilio-psoas and adductor muscles are tightened which tends to hold the fragments together. If properly applied the spica holds the thigh in

complete abduction and extension as shown very well in this x-ray. This plate shows the angle of the shaft with the neck to be normal and the fragments are together. The fragments must remain together as long as the plaster holds. We have, then, a correction of alignment and good apposition, two essentials for good anatomical results in fracture anywhere.

There are certain patients for which the Whitman method is not applicable. The general health will not permit a general anaesthetic with safety or the restraint necessary for fixation. This is especially true in the very old. I now have such a patient under observation. She is 73 years old and gives a history of an apoplexy four years ago. When she entered a hospital, five hours after the injury, she had a temperature of 101, a systolic blood pressure of 210, a pulse pressure of 90 and the urinary findings of chronic nephritis. This patient is now sitting almost erect in bed with a heavy sand bag on each side of her leg. That is her only treatment, and is to be her only treatment. We hope to send her home alive with her $1\frac{1}{4}$ inches of shortening. But a decided majority of hip fractures can be safely treated by abduction and plaster fixation. At times it is wiser to wait a few days after the injury before giving the anaesthetic. We discharged a patient from this Hospital last week that was a case in point. When she was admitted her tongue was dry, the intestines markedly distended with gas and she was unable to retain food or liquids. It was six days before it was thought safe to give her an anaesthetic. After those first six days the Whitman spica was applied and her further progress was uneventful. It must be remembered that there is often considerable shock in these cases which must be considered first.

Other methods of treatment that might be briefly considered are the Ruth-Maxwell, the Cotton and the operative. The Ruth-Maxwell is a traction method in which the traction is made both longitudinally and laterally. The lateral pull is made against the inner side of the thigh

near the perineum. This pull is also made slightly upward to prevent external rotation. The longitudinal traction is obtained by the ordinary Buck's extension. I am confident excellent results might be obtained by this method if the proper care be given the treatment. The method of Cotton is rather unusual. He believes it a good plan to have all hip fractures impacted. To this end he has devised a method of artificial impaction. Under anaesthesia he manipulates the fragments until they are in the desired position and then produces impaction by striking over the padded trochanter with a large wood mallet. When he has satisfied himself that impaction is produced he encloses the leg and pelvis in a plaster spica. Cotton seems to have obtained very good results by this treatment. The operative treatment is indicated in certain selected cases as in fractures elsewhere. I believe that a middle course should be held between the operative and non-operative treatment of fractures in general. This rule applies here. Some of the non-union cases, and perhaps a few others to correct deformities, should be operated upon. Probably the best operative treatment is the bone peg following the technic of Davison of Chicago. The use of nails and screws is not advisable since the autogenous graft gives better results and a foreign body is not introduced into the tissues.

In connection with this patient shown today and in all other cases of fractured hip you should remember especially the following general points:

1. The life of the patient comes before good function always, but when possible one should try to obtain good anatomical and good functional results.
2. Fractures of the neck of the femur at the base will heal with bony union in practically all cases regardless of the type of treatment.
3. Fractures through the femoral neck inside the capsule often fail to form bony union.
4. Fractured hips are not infrequently not diagnosed.

5. Operation is indicated in selected cases of non-union.

6. The Whitman abduction method of treatment of fracture of the neck of the femur gives excellent results and may now be considered a standard treatment.

Clinic of Dr. C. B. Francisco
Department of Orthopaedic Surgery.

**JUVENILE DEFORMING OSTEOCHONDRTIS
(PERTHES' DISEASE)**

I wish to present two cases that are rather typical of the above named disease. However, the condition is not a disease and this lead me to first say a word about the nomenclature. Prof. George Perthes of Tubingen, described the pathology as being a delayed ossification of the cartilage of the epiphysis and the juxta epiphyseal cartilage of the neck and isolated areas in the acetabulum, and suggested the name of Juvenile Deforming Osteochondritis. This name is correct and in accordance with the pathology, but unfortunately the name "Perthes' Disease" is the term most commonly used and associated with the condition.

Dr. Arthur Legg of Boston, probably was one of the first men to call attention to the fact that the condition was not tubercular, but unfortunately he did not suggest the pathology, and as a result has never received the recognition due him for his observation. If we grasp the pathology, the condition is easy to understand. There is a failure of ossification, the result is softening of the head and neck of the femur compared to the other bones, and the mechanical effect is a flattening out of the head and a shortening and thickening of the neck of the femur.

FIRST CASE—J. S., aged 5½ years, a girl. Admitted to the Clinic, Oct. 1. Chief complaint right hip. The mother states that the child had a fall last March while playing, and that she complained very much of her right hip for 3 or 4 days following the injury. She was free from pain for 2 months and then complained again for about one week. Was symptom free until August, when she had a more severe at-

tack, lasting 5 or 6 days. Since then she has complained every few days, and rarely has more than a few days of freedom from pain. The child has had no night cries and no night sweats, and there has been no noticeable fever. The father and mother are living and well. This is the only child. No miscarriages. Wassermann was negative.

Mother has been told the child has tuberculosis of the hip. An x-ray picture was ordered. (Fig. 1) and we were very much surprised to find the condition that you see. For as you will note the right hip appears to be in very good condition compared to the left. After seeing



Figure No. One—Case No. One. Both Hips Involved.

the picture we tried to get the mother to say that the child had occasionally complained of the left hip, but this she was sure was not true. We then concluded that the operator in the x-ray department had made a mistake in loading the plate, and sent the child back for another picture. However, there had been no mistake, and you can see that the head and neck of the right femur are not normal. There is beginning flattening of the head and thickening of the neck.

The child was admitted to the Hospital on October 14, 1919, and a double plaster paris spica applied and the child kept in bed. The left hip was in plaster for 10 weeks and the right for 14 weeks. The child was kept in bed for a week longer after removal of the cast and then allowed to get up and about. She is now able to run and jump as you can see, and

is absolutely symptom free. The x-ray shows no apparent improvement of the bones. The question arises, will she have a return of symptoms? That remains to be seen. We don't expect the left hip to get any worse, but there is a possibility that the right one might, but by watching her and again taking her off her feet in case of pain in that region, and by attention to her general condition, I think we can prevent its getting any worse.

SECOND CASE—D. D., a girl age 12 years. Admitted to Out-Patient January 3, 1920. Chief complaint pain in left hip and leg. Patient states that she began having pain in her left hip when she was 5 or 6 years old, and that her mother took her to clinic and was told that she had tuberculosis. A year or so later her mother took her to the General Hospital and was again told that she had tubercular hip disease. However, no treatment was begun and since that time she has had pain at intervals. She says that she is able to go to school most of the time, but can't always run and play with the other children. She is rather small for her age, and you will observe that she walks with a slight left limp. The left hip presents moderate muscle spasm and some limitation in rotation and abduction. The trochanter seems a trifle high, and the leg is about $\frac{1}{2}$ inch shorter than the right. The child states her parents are living and well, but it is impossible to obtain a family history, as the child came to the Clinic alone.

An x-ray was made of this child (See Fig. 2) and I think you can make a diagnosis in this case from the discussion of the previous one. You will note the resemblance of this child's left hip and the left hip of the first child. You see how the head has flattened out and how it seems to be separating into about three pieces, and you can see how the acetabulum has conformed to this changed outline of the head. In my opinion the remodelling of the acetabulum is what causes the pain in these conditions. In the first case there was no pain in the left hip, which could be explained on this

theory; there was also delayed ossification in the acetabulum, which resulted in the brim remaining soft, and then the process occurred early before the bones were very firm, with the result that as the head flattened out under the weight of the body the acetabulum was able to readily conform to the change, hence she had no pain. Now in this case it is quite likely that this child will not have much more trouble, for the reason that the accommodation of the acetabulum is nearly complete. Wassermann in this case is negative.

The plan of treatment in this case is somewhat different from the first one.



Figure No. Two—Case No. Two. Involved Left Hip.

Here we have simply put on a plaster cast and allowed the child to continue going to school. She says that she has had no pain in the hip since the plaster was applied. The reason that we don't take her off her feet is we want her to continue weight bearing so that she will completely mould the acetabulum to fit the head of her femur, after which she will be symptom free. We will leave her cast on for about six or eight weeks and then remove it; if she again complains we will re-apply it for a time.

These cases represent the usual types of this condition. It is easy to diagnose when there has been the usual change. In my opinion the x-ray picture is so character-

istic in this condition that one can make a diagnosis from it alone. I know of no diseased joint that gives you a similar x-ray reading.

Many things have been suggested as being the real cause of this condition, such as syphilis, trauma, and focal infection. However, none of these conditions has



Figure No. Three—Case No. Two. Normal Right Hip.
been established as being the direct cause, and in the light of our present knowledge you can ascribe the cause to improper development.

The important thing for you to remember is, that it is not tubercular, and that the treatment does not need to extend over a long period of time, thereby producing atrophy from disuse and hindering the growth of the child; that these cases get well and have but little disability as a result of the affection.

Clinic of Dr. P. T. Bohan

Department of Medicine.

DISCUSSION OF HEART CASES

In the diagnosis of heart failure our custom is to determine the function of the heart muscle that is at fault. In at least

95 per cent of cases there is disturbance in the function of tonicity or rhythmicity, or of both. Disturbance of rhythmicity may cause impairment of tone with resulting dilatation as is frequently found in fibrillation, but loss of tone seldom causes any serious disturbance of rhythm. If you understand the underlying principles of heart failure, the diagnosis can be made, in the vast majority of cases, without graphic records. Loss of tone causes shortness of breath on exertion and blood stasis. Cardiac dropsy always means impairment in the function of tonicity. The commonest arrhythmia producing heart failure is auricular fibrillation, which is easily recognized by the wholly irregular pulse.

Loss of tone is usually due to exhaustion of the heart muscle from over-work, as in cases of valvular defect (mitral stenosis or aortic regurgitation), disease of the aorta, or high blood-pressure. Structural alteration of the myocardium is a comparatively rare cause.

Fibrillation is due to mitral stenosis in about 40 per cent of cases. Aortic regurgitation and fibrillation rarely co-exist. The importance of such etiologic factors in fibrillation as alveolar abscesses and disease of the thyroid gland cannot be too strongly emphasized.

I desire to present a few cases which illustrate the common types of heart failure:

Case I. Mr. S., 72 years old; tailor, retired. Loss of tone from overwork, due to high blood pressure.

Anamnesis: Diseases of childhood. No history of sore throat. Nocturia 3 to 5 times for 3 or 4 years. Shortness of breath on exertion for four years. For two weeks before coming to the hospital he had to sleep in a chair at night, and one week before admittance he noticed swelling of feet.

DR. BOHAN: What are the essential features of your findings on this patient?

STUDENT: His pulse is regular—88 to the minute. The blood pressure is 215-95. The brachial artery is thickened and tortuous. The apex beat is in the 6th inter-

space, one inch outside the nipple line. Auscultation of the heart reveals a systolic murmur at the apex. The second aortic sound is markedly accentuated.

DR. BOHAN: What is your diagnosis?

STUDENT: Loss of tone of the heart due to hypertension.

DR. BOHAN: Is that diagnosis complete?

STUDENT: The high blood pressure, the thickened arteries and the cardiac hypertrophy would indicate chronic interstitial nephritis.

DR. BOHAN: That is correct, and the diagnosis of chronic nephritis is supported by the history of nocturia and the urinary findings. The specific gravity of the urine is low—1008 to 1014, it contains a small amount of albumin with a few hyaline casts, and the phthalein excretion was 35 per cent in two hours. Did you find any signs of dilated heart?

STUDENT: He has none of the findings of dilatation now, but the record shows that his feet were swollen and the liver enlarged and tender when he came to the hospital.

DR. BOHAN: On admittance he was given codein gr. 1 for sleep and 25 drops of the tincture of digitalis t. i. d. On this treatment with rest in bed, all signs of dilatation disappeared in one week.

Case II. Mr. L., 62 years of age; farmer; married; used alcohol and tobacco moderately. Auricular fibrillation probably of 25 years' duration.

Anamnesis: Typhoid fever at 25 years of age. Considerable toothache in young adult life. Tonsilitis, not severe, at 37. Patient came to the hospital complaining of shortness of breath on exertion, which began 25 years ago and has become worse lately. Since the attack of typhoid fever he has noticed a "fluttering in the chest and shortness of breath" when attempting to do heavy work. The feet swelled 5 or 6 years ago when he worked very hard, but there has been no swelling since.

DR. BOHAN: What did you find on examination?

STUDENT: Patient is very well nour-

ished; pupils are unequal and react sluggishly; teeth poor; glands negative; lungs negative; liver down two finger breadths, not tender; spleen not palpable; patellar reflexes negative; urine negative; Wassermann negative; blood pressure 190-110. X-ray plate shows wide aorta. The apex beat is within the nipple line, there are no murmurs, the second aortic sound is accentuated, the rate is 48 to the minute and the rhythm is irregular.

DR. BOHAN: What is your diagnosis?

STUDENT: I think he has incomplete heart block.

DR. BOHAN: That diagnosis is not correct. You have evidently paid more attention to rate than to rhythm. In incomplete heart block the rhythm is practically normal except for a missed beat that may come at regular intervals. The finger on this man's pulse shows the typical irregularity of auricular fibrillation. Auscultation of the heart shows that nearly half the beats of the dominant rhythm are followed immediately by a small beat. This coupling of the beats is typical pulsus bigeminus. The small beat is a ventricular extrasystole and in this case, as in most cases, is due to the effect of digitalis.

That a heart may be safely digitalized within a few hours with large doses of digitalis, is well illustrated by the results obtained on this patient. On January 30 at 4:45 P. M., he was given 4 drams of the tincture of digitalis. The heart rate at this time was 112. At 7:15 P. M., the heart rate was 84. This was a drop of 28 beats per minute in $2\frac{1}{2}$ hours. On February 2 the heart rate was 80 and at 2 P. M. he was again given 4 drams of the tincture of digitalis. At 3:30 the rate was 56, and at 9 P. M., 50. The following day the patient was nauseated for about twelve hours and vomited twice. Today, twelve days since the last dose of digitalis, the slow rate of 48 and the frequent coupled beats show that the heart is still digitalized. It has been found in a large number of cases of fibrillation that 4 drams of the tincture of digitalis, or even 5 drams for patient weighing 190 pounds,

will produce effects on the heart in 4 to 6 hours. The importance of a single large dose of digitalis when immediate effects are desired is obvious.

Case III. Mrs. P., age 63 years; widow. Auricular fibrillation probably due to thyrotoxicosis.

Anamnesis: She has had the diseases of childhood; never had rheumatism; pneumonia at 25. She came to the hospital twelve days ago complaining of cough, fever, bloody expectoration and marked dyspnoea. She has had a winter cough for ten years, worse the last few years; short of breath for fifteen years; fever and bloody expectoration began three days before admittance.

DR. BOHAN: What did you find on this patient?

STUDENT: Temperature is 98.4; pulse 88—scarcely any two successive beats the same distance apart; eyes negative—exophthalmos, Stellwag's and von Graefe's signs absent; teeth in good condition; tonsils apparently normal; no tremor; no edema; right lobe of thyroid enlarged; lungs negative except for a few crepitant rales over both lower lobes; heart normal in size—no murmurs—rhythm wholly irregular; spleen not palpable; liver easily palpable and tender.

DR. BOHAN: What is your diagnosis?

STUDENT: The irregularity is typical of auricular fibrillation.

DR. BOHAN: Is rhythmicity the only function of the heart muscle that is abnormal? Is there any evidence that one of the other four functions may be impaired?

STUDENTS Her cough, the rales in the lower lobes of the lungs and the enlarged liver are signs of impairment of tonicity due to the rapid, irregular contraction of the ventricle.

DR. BOHAN: That is correct. On admittance the liver was down two fingers and quite tender. Her temperature ranged from 99.5 in the morning to 100 and 101 in the afternoon for five days. There were numerous crepitant and sub-crepitant rales over the bases of both lungs.

The diagnosis was broncho-pneumonia due to blood stasis from a failing heart. She was propped up in bed, given tincture of digitalis 50 drops t. i. d., and on the fifth day the temperature was normal and at the end of a week the pulmonary findings were much improved.

The tendency of patients with dilatation of the heart to develop pneumonia is exceedingly important, and this is especially true of the patients with only a slight dilatation extending over a long period of time, as in patients with fibrillation. The pneumonia in these cases is similar to the pneumonia that may develop in any patient, especially if he is advanced in years, if he is confined to bed and lies on his back for any length of time.

Another feature of this case to which I want to call your attention is this lump about the size of a hickory nut, in the right lobe of the thyroid. This is an adenoma of the thyroid gland and is a common form of thyroid disease. If these adenomas degenerate and cause systemic manifestations the symptoms are nearly always cardiac, while the eye findings and nervousness of exophthalmic goiter are usually absent. The two common extracardiac causes for fibrillation are apical abscesses and disease of the thyroid, so in this patient it is justifiable to assume that the thyrotoxicosis due to the adenomatous thyroid is of etiologic significance.

Case IV. Case of congenital heart disease—pulmonary stenosis and probably patent septum ventriculorum and possibly patent ductus arteriosus.

Anamensis: Helen M., 10 years old; orphan. She had whooping cough in infancy; has had many attacks of sore throat; never had rheumatism; her wind has been a little short as long as she can remember.

Physical findings: Pupils are unequal; tonsils buried and there is a large subtonsillar gland on each side; lungs are negative; liver and spleen not palpable; no edema; no dyspnoea; Wassermann two plus; red cells 6,500,000; marked cyanosis of face, ears and finger nails; moderate

clubbing of fingers; apex beat of heart can neither be seen nor felt; there is a diffuse pulsation in third left intercostal space; cardiac dullness extends from one finger to right of sternum to left nipple line; there is a loud systolic murmur heard over precordium with maximum intensity over pulmonary cartilage, murmur is also heard behind to left of spine; over left second intercostal space is an indistinct systolic thrill; second pulmonic sound is slightly accentuated.

Conclusions: The presence of cyanosis, clubbed fingers and heart murmurs, in a child, are findings that should always make you suspicious of congenital heart disease. Cyanosis without marked dyspnoea is not found in acquired heart lesions; cyanosis of cardiac origin without dyspnoea suggests a mixture of venous and of arterial blood. The systolic murmur heard best over the pulmonary cartilage and the thrill are the findings that we would expect in the commonest congenital heart lesion—pulmonary stenosis. According to statistics, in patients of this age with congenital pulmonary stenosis, there is either patency of the foramen ovale or a defect in the interventricular septum in 82 per cent of cases. In patent foramen ovale the right ventricle is small, while in patent septum ventriculorum the right ventricle is hypertrophied. As the dullness to the right of the sternum and the diffuse pulsation in the left third and fourth intercostal spaces are signs of enlarged right heart, the points are in favor of a defect in the ventricular septum. Some authors state that patent ductus arteriosus causes a systolic murmur, heard best behind to the left of the upper dorsal vertebra. In 25 per cent of cases with pulmonary stenosis and septum defect there is also patency of the ductus arteriosus, and the older the child the more likely will this lesion be found. Therefore, along with the other lesions it seems as if the chances are a little better than one in four of a patent duct in this case.

Clinic of Dr. Donald R. Black

Department of Clinical Pathology

BRAIN SYPHILIS ASSOCIATED WITH INTRACRANIAL PRESSURE AND RAPID LOSS OF VISION

REPORT OF CASE: The patient, a young actress, 19 years of age, was first seen in another hospital, July 26, 1919, complaining of severe frontal headache, uncontrollable vomiting and slight blurring of vision.

HISTORY OF ILLNESS: Two months before admission, she began to complain of slight frontal headache, which was dull in character and almost continuous. In the mornings she occasionally felt a little dizzy, especially on changing from a reclining to an upright position, not infrequently complaining of seeing double. About two weeks later her headaches had increased in severity and she began to vomit, at first only after meals, but later without reference to food. The vomiting for the past two weeks has been of the projectile type, and she is so weak that she has been confined to bed. About three days before admission, her eyelids became swollen and red. The eyes became unusually prominent and she has complained of a deep boring pain back of the eye balls. The patient has been unusually active, and, aside from the usual diseases of childhood, has been perfectly healthy. The menstrual history is negative. She denies venereal infection.

FAMILY HISTORY: Father is living and well. Mother is living and has a 4 + + + Wassermann Test. One brother died of brain tumor.

EXAMINATION: The patient is somewhat emaciated, slightly anemic, and very dull. The eyelids are markedly swollen and red. The eyes protrude until quite noticeable. The pupils are dilated, regular in outline, and practically fixed. There is no nystagmus. Vision 15/20 in both eyes.

OPHTHALMOSCOPIC EXAMINATION: Marked edema of both papillae. The veins are distended, while a few of the arteries show reduction in caliber.

NOSE, SINUSES AND THROAT: Examination of the nose reveals nothing of pathologic interest and x-ray examination of the sinuses is negative. The tonsils are hypertrophied but not badly infected. The teeth are in excellent condition. The heart is not enlarged and the sounds are normal, the rate being 58. The lungs are normal.

ABDOMEN: Some tenderness in the epigastrium, possibly muscular, due to the incessant vomiting. There is no general adenopathy, only a few post cervical glands being palpable. Both superficial and deep reflexes normal. There is no paralysis.

PULSE 56, **RESPIRATION** 26, **TEMPERATURE** 100 degrees F.

URINE negative.

BLOOD COUNT: Hemoglobin 75 per cent, RED CELLS—3,600,000.

WHITE CELLS—9,000, Neutrophiles—60 per cent, Large Lymphocytes—10 per cent, Small Lymphocytes—26 per cent, Transitionals—3 per cent, Eosinophiles—1 per cent.

BLOOD WASSERMANN TEST—2 + +

SPINAL FLUID—Under slight pressure.

WASSERMANN TEST—4 + + +

CELLS—20 Lymphocytes per cubic millimeter.

NUGUCHI GLOBULIN TEST—2 + +

GOLD CHLORIDE—reduction in tubes 4, 5, 6, 7.

The vomiting was temporarily relieved following the lumbar puncture and the patient was able to retain broth, but in the course of five hours the vomiting returned as severe as ever. A second puncture was made the following day. The patient reacted so badly to the second puncture that a third was deemed inadvisable. The patient was given .6 gms. of salvarsan, and potassium iodide was ordered in increasing doses. She was unable to retain the latter.

In view of the foregoing facts, a decompression was suggested, the idea being two-fold:

First: To relieve intracranial pressure and possibly prevent further progress of the eye condition.

Second: To relieve the vomiting and

permit the patient to take potassium iodide.

However, the decompression was not done, but the patient was given 0.6 salvarsan every five (5) days. The swelling of the eyelids gradually reduced and the general condition of the patient improved. In one week she was able to take 15 drops of saturated solution K. I. three times daily. Her vision became progressively worse and in five weeks she was totally blind.

In considering the diagnosis at this time, we were sure of one point; there was marked intracranial pressure. The question of the exact nature of the pathological process causing this increased pressure is a difficult problem. We know that syphilis of the brain occurs in a variety of forms. We also know that intracranial pressure is increased in most of these conditions. Perhaps the most commonly met with form of brain syphilis is a meningitis. These meningeal lesions may extend and produce a diffuse gummatous encephalitis, or we may encounter more or less localized processes usually in the pontine and peduncular surfaces. Another not uncommon complication is a cerebral endarteritis which may result from the obliteration of a large basilar vessel secondary to a meningitis, or it may be a primary affair. We not infrequently have an internal or external hydrocephalus. The exact nature of the factors which produced the increased tension of the cerebrospinal fluid in this case are rather vague.

From the history of the case, one would consider brain tumor; probably a gumma. But from the course of the case, we would be more inclined to favor a syphilitic meningitis with possibly extensive gummatous formation as a causative factor in the production of the increased intracranial pressure. The exact manner of production of the choked discs is an unsettled question, as is also the production of the associated optic atrophy. Possibly the best explanation at present is that an extension of the meningitis occurs within the sheath of the optic nerve and produces a mechan-

ical edema and that the process gradually invades the nerve and destroys the fibers. It is quite possible that in some cases both these phenomena have existed for some time, and that often at the time of examination for an acute affair, the marked choking of the disc obscures an already existing atrophy of at least part of the fibers.

The patient was admitted to Bell Memorial Hospital, November 26, 1919. Spinal puncture revealed findings similar to those described earlier.

OPHTHALMOSCOPIC EXAMINATION by Dr. E. J. Curran at this time showed the following: No light perception whatsoever, blurred optic disc, no swelling, gray optic atrophy, arteries and veins small, some evidence of intracranial pressure.

The parents were very insistent that an attempt be made to restore the girl's vision. Realizing as we did the futility of ordinary therapeutic measures in such cases, we decided to try to relieve the slight excess of intracranial pressure by a decompression operation, hoping that at the same time slight improvement might be gained. Dr. T. G. Orr performed the operation on December 27, and the patient made an uneventful operative recovery.

NEUROLOGICAL EXAMINATION by Dr. A. L. Skoog one month following operation.

EYES: At times patient thinks she sees light. This is uncertain to testing. She also says she can see moving objects at the extreme left lower quadrant. We are unable to prove this statement. Pupils widely dilated with some springing but no true light reflex.

DISCS: Almost complete gray atrophy, the right about the same as the left. Blood vessels stand out distinctly and have smaller caliber than normal. No swelling is evident.

FIRST CRANIAL NERVE—No certain disturbance of sense of smell. Possibly little impaired by acute rhinitis. Extrinsic optic nerves not impaired.

FIFTH CRANIAL NERVE—Function normal.

SEVENTH CRANIAL NERVE—Normal.

EIGHTH CRANIAL NERVE—Normal.
NINTH CRANIAL NERVE—Normal.
TENTH CRANIAL NERVE—Normal.
ELEVENTH CRANIAL NERVE—Normal.
TWELFTH CRANIAL NERVE—Normal.
GUSTATORY SENSE—Normal.

Percussion of head gives normal notes. Decompressed area above the right temporal region has repaired perfectly. There is no great increase in tension on decompressed area. Normal cerebral vascular impulses can be seen and palpated. Spinal motor and sensory systems are normal. No apparent disturbance of co-ordination. Deep reflexes in upper extremities considerably diminished. Superficial reflexes are normal. Patellar and Achilles reflexes are absent.

CONCLUSIONS: At present there is no evidence, judging by neurological findings, of the presence of a tumor in the cranium. The pathological process involving the brain, which caused the optic atrophy, has now subsided. It is possible that some of the optic atrophies which we so frequently see in brain syphilis are caused, or at least aggravated by, the general intracranial tension. On numerous occasions in a great many neural syphilitides, we have found from 250 to 350 mm. pressure at the third lumbar interspace. Probably many of the optic atrophies are the result of, or at least partially caused by, the inflammatory process involving the meninges surrounding the optic nerves, and extending into the nerve substance and into the retina.

It would be of considerable interest to attempt to prevent complete optic atrophy in these cases by doing decompressions in the early stages of the pathological process, or at a time when the manifestations of the atrophy of neural fibres is first observed in the nerve, head, or retina by means of an ophthalmoscope.

Hot house people are like hot house plants. They can't stand exposure to severe weather, says the United States Public Health Service. Sleep with the windows open and keep every room well ventilated.

THE JOURNAL
of The
Kansas Medical Society

W. E. McVEY, M.D. - - Editor

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Medicine, A Business

There are occasional men in the medical profession who acquire considerable fortunes as a result of their professional efforts, but not very many have entered the profession with the idea that it was likely to prove a bonanza.

If one began the study of medicine because it harmonized with his taste and inclinations, he also had some assurance that in the practice of medicine he could earn a modest livelihood and maintain a fairly respectable social standing. To those who have spent most of their lives in the practice it often seems that medicine should offer a larger recompense than accrues to the average physician.

There are many men that have the foresight and the business acumen to acquire wealth, but they are too busy making a living for their families—they cannot spare the time and they dare not take the risks the fortune getting business entails. So there are many physicians who have the qualifications for big business, but they are so busy practicing medicine—their time so consumed, their minds so fully occupied with sick people and their ailments, that opportunities for gain pass unheeded.

Even those who have ignored its traditions and have succeeded in making a

business of medicine, find themselves at times overwhelmed with professional duties, so engrossed in the services they may render a suffering people that even they seem, for the time, careless and indifferent to the items of profit and loss.

It seems inevitable that the practice of medicine will be more generally regarded as a business by those engaged in it, or medicine be exploited by those who can see its financial possibilities. That there are great financial possibilities in medicine some are well assured and many have yet to learn.

Regarding the practice of medicine as a business, one might well consider the principles upon which it is conducted. He must admit that medicine is out of joint with business, as business is understood and practiced today.

The present fee system is not in harmony with the principles of good business, for there is no adjustment of renumeration to services rendered—perhaps as a taxi driver, but certainly not as a physician. For instance, one has a typhoid case five or six miles in the country. It requires no particular thought and causes no worry, but it must be visited every day for perhaps four, possibly six weeks. For this his fees will amount to \$200 or \$250. He has a case of pneumonia in town which requires ten times as much study and thought, causes a great deal more worry and loss of sleep, and for this his fees will amount to \$30 or possibly \$50. In the one case he has earned possibly \$50 for his services as a physician and \$200 for his, may we say, taxi services. In the other case he has earned \$500 for his services as a physician and received \$50.

Of course the taxi driver part of the fee is essential and cannot be eliminated, but there should be added to it a fee for the professional services rendered and this should be in some degree commensurate with the value of such services. But there may be several factors which determine the value of the services rendered. If the ultimate benefit to the patient be the only factor considered some of our most

strenuous efforts would be unrecompensed.

If the value of a patient's life be determined by the state of his finances and our services estimated accordingly, we would still be very poorly paid for the bulk of our work. It does seem reasonable that the fee should vary according to the character and severity of the ailment one is engaged to treat and upon such a basis a fairly remunerative system of charges could be built up. There must also be considered the added value of the services of men of particular skill and experience, whose practices are limited to certain fields and who are specially trained along definite lines.

On the whole, if medicine is to be generally regarded as a business, it would be advisable for the state society to appoint a commission, or an efficiency expert, to study and reconstruct our system of charges.

The doctor's clientele is made up of three classes of people; those who will pay, those who won't pay, and those who can't pay. In the early years of his practice he has more of the last two than of the first, but after his newness has worn off he may have enough of the first class to even up the other two. No doctor, however, ever gets his practice down to a strictly business basis, he always has a few of the second and third classes on his visiting list. But if we are to make a business of the practice of medicine those two classes must be eliminated. Sentiment is out of date when big business is the vogue.

The only reason that doctors take care of those who can't pay is that doctors have always done it. The doctors have assumed a burden which belongs to the state. Why not let the state carry its own burdens? We help to pay the bills and our fair share of them.

There is no reason for continuing our services to the won't pay class. They are entitled to no consideration and they won't pay as long as they can find doctors who are willing to serve them. One of the objects in establishing the Credit and Collec-

tion Bureau of the State Society is to get this class tabulated and card indexed. If the members of the society will take advantage of the opportunity offered by this bureau and the county societies will interest themselves in the matter, the won't pay class will soon be a thing of yesterday.

Etcetera

The old doctor full of sap is and has been a live wire—a worker.

Dr. W. B. Beach, formerly of Concordia, is now located at Roswell, New Mexico.

The world lets the man pass who knows where he is going.

Dr. F. E. Richmond has removed from Downs to Stockton.

Some of us are too big to do little things and too little to do big things.

Simon advocates a return to the use of the original crude ipecac in the treatment of intestinal endamebiasis.

A man who knows his own mind has a limited acquaintance and but little to remember.

Exophthalmic goitre is nosologically known as Graves' disease, Basedows, Begbie's, Marsh's, Parry's, or Flajani's disease. The administration of small doses of iodine, long continued, is said to retard or prevent the development of goitre.

The recurrent headaches seen by the oculist are caused by eyestrain; those seen by the internist are toxemic; those seen by the rhinologist are due to sinus disease; those seen by the neurologist are due to nerve strain and those seen by the syphilo-grapher are caused by syphilis. Moral: A man can find what he is looking for.

A step up in hygiene and the prevention of disease is the use of the *Kerchett* and doing away with the muuco-purulent saturated cloth handkerchief. According to "Pharmacal Advance" these kerchetts are made of specially prepared cotton paper, thoroughly impregnated with formaldehyde, so modified by essential oils as to render them nonirritating to the mucous membranes. They are to be used once only and then destroyed.

The health and happiness of a woman depends largely upon the normal functioning of the ovaries.

The rectum appears to be frequently infected in women who have gonorrhea. Boas found it in 14 out of 88 cases. It usually responds to irrigation with a 1 to 3000 solution of potassium permanganate.

Beverley Robinson advises the use of salicylate of ammonium as preventive and curative of ordinary colds and also of influenza. Ordinarily it should be given in five grain doses, in capsules, and repeated every hour until five or six, or even ten or twelve, doses have been given.

Dercum (Jr. Nerv. & Ment. Dis.) reports favorable results in epilepsy from the administration of luminal (phenyl-ethyl-barbituric acid) and luminal sodium. One and a half grains of the former or two grains of the latter given at bed-time inhibited the seizures and in many cases the attacks were abolished for months or years.

Lenier (N. Y. Med. Rec. 7-19) gives the following signs of hypothyroidism: Subnormal temperature, slow pulse, gradual alopecia, nutritional disturbances, history of cold hands and feet, lack of initiative, fatigue and tendency to drowsiness during the day.

Blunt and Mallon report some experiments on the digestibility of bacon (Jr. Biolog. Chem. 5-19). They found that bacon fat was about as digestible as other fat. The average percentage of digestion of the fat of slightly cooked bacon was 96.3 and of much cooked bacon 97. The average percentage of utilization was 92.8 for the slightly cooked and 95 for the well cooked.

Garretson says: (N. Y. Med. Jr. 2-7-20) "The extirpation of a hyperactive thyroid gland is in most instances absolutely contraindicated and is a procedure based upon ignorance of glandular function. That gland is overactive in an effort to compensate for a deficiency of function elsewhere in the endocrine gland chain. The intimate interrelationship of glandular function teaches us that hyperactivity is a compensatory effort to offset hypoactivity elsewhere. In the case of the thyroid it indicates an ovarian or suprarenal gland exhaustion. Artificially supplying the deficiency under proper conditions will effect the desired result."

Kaplan says: (N. Y. Med. Jr. 2-7-20) "The doctor as well as the layman should recognize the fact that the harm done by wholesale indiscriminate tonsillectomies is

not immediate and that an insidious *cachexia tonsillopriva* often assumes the clinical form of an unmanageable headache, a distressing cardiac phenomenon, osseous or articular manifestations, obscure leucocytoses, peculiar febrile rigors, or a fulminating appendiceal infection. We must be warned not to accept the tonsil as a primary and causal element of disturbance every time it presents a pathological appearance."

Advance reports of the mortality statistics for 1918 show a death rate of 583.2 per 100,000 from influenza and pneumonia. The excess mortality caused by the influenza epidemic occurring during the last four months of the year was 416.2 per 100,000. The mortality rate for pneumonia alone was 284.3, for organic disease of the heart it was 152.3, and for tuberculosis 149.1 per 100,000. In the mortality due to external causes the highest rate is from accidental falls (12.6) and the next highest is from suicide (12.1). The mortality rate from railroad accidents and injuries was 10.5 and from automobile accidents and injuries 9.2 per 100,000.

The annual meeting of the Northeast Kansas Medical Society will be held in Topeka Thursday, March 25. A very attractive program has been prepared (see under Societies) and a good attendance is expected. The meeting will be held in the Elk's Club building and the visiting members will be entertained at dinner by the Shawnee County Medical Society.

Dr. Katherine L. Storm of Philadelphia, is announcing the removal of her offices from 1541 to 1701 Diamond Street, Philadelphia. The new building which Dr. Storm has purchased has treble the capacity of her present building, and is being equipped with every facility for quick and exact work. Dr. Storm is justly proud of the ever widening demand for the Storm Binder and Abdominal Supporter, and is planning to maintain her reputation for immediate response to each order.

Armour and Company will be pleased to send a reprint of Frederic Fenger's article "On the Seasonal Variation of the Iodin Content in the Iodin Gland" to any physician who will ask for it. This paper records work covering more than twelve months, which work was done in the Research Laboratory in Organotherapy in Organotherapy of Armour and Company. Address Armour and Company, Chicago.

Walker (Jr. Lab. & Clin. Med.) gives his experience with influenzaz pneumonia at Camp Sherman. He describes the conditions other than pneumonia that were found in 100 autopsies. The most frequent Complications were empyema and endocarditis. He defines influenza pneumonia as "primarily an acute hemorrhagic lesion, interstitial, nodular, or massive in extent, rising from a pulmonary capillary necrosis due to some toxic agent and resulting in a secondary purulent pneumonia with healing by organization." The pneumococcus and the streptococcus hemolyticus were the organisms most frequently recovered from the lungs at autopsy. The bacillus of influenza was found in only four per cent of the cases.

At the request of the Honorable Lorraine Elizabeth Wooster, State Superintendent of Public Instruction, Topeka, Kansas, and President Thomas W. Butcher, of the State Normal School, Emporia, Kansas, the United States Commissioner of Education has called a regional conference on rural education and country life for Kansas and neighboring states, to be held at the State Normal School, Emporia, Kansas, March 29 to 31, both inclusive. The conference topic is "What Our Rural Schools Must Be and Do to Meet After-War Condition and the Call of a New Day."

The American Board for ophthalmic Examinations is a joint board consisting of three members each from the American Ophthalmology society, the section on Ophthalmology of the A. M. A. and the American Academy of Ophthalmology and Oto-Laryngology. The next examination of the Board will be held at New Orleans, Monday, April 26. After 1920 the American Ophthalmological Society and the American Academy of Ophthalmology and Oto-Laryngology will require every applicant for membership to possess the certificate of this Board or a degree in Ophthalmology conferred by a university recognized by them as competent to prepare students for such degree.

Gertrude Hickling (Brit. Med. Jr. Jan. 31) reports some interesting results in the treatment of children with adenoids by means of a systematic nasal drill. From the description of the exercise it is essentially a forcible blowing of the nose repeated four or five times. The adenoids are apparently not diminished but the symptoms they produce are cured. (This is perhaps explained by, and goes to prove,

a theory that adenoids are the result of sinus infection and post-nasal drainage. The sinuses being cleared by forcible blowing, the constant irritation of the tissue in the vault is removed.)

It has long been held that the results of antidiphtheritic horse serum in the prophylaxis and treatment of diphtheria were incontrovertible evidences of its specific action. Bingel advanced the opinion that as good results can be achieved with normal horse serum as with the antidiphtheric serum. Recently Klotz and Dorn (Berl. Clin. Woch) have reported the results of animal experiments which show decidedly in favor of the antidiphtheric serum. However both of these authors admit that normal horse serum may be as effective in the human.

An association of Medical Veterans of the World War was organized at Atlantic City, in June, 1919, at the time of the meeting of the American Medical Association, and a constitution and by-laws adopted. About 2800 physicians have already joined and all others who are eligible are invited to join the society.

The Constitution states that "The Dominant Purpose of this Association Shall Be Patriotic Service. The objects of this association shall be: To prepare and preserve historical data concerning the medical history of the war; to cement the bonds of friendship formed in the service; to perpetuate the memory of our medical comrades who made the supreme sacrifice in this war; to provide opportunity for social intercourse and mutual improvement among its members; to do all in our power to make effective in civil life the medical lessons of the war, both for the betterment of the public health and in order that preparedness of the medical profession for possible war may be assured."

Lomby (Rev. d'Hygiene) found the diphtheria bacillus in 59 cases out of 1974. Specimens of sputum submitted for examination, from suspected cases of tuberculosis. In sixteen of these cases the diphtheria bacillus was associated with the tubercle bacillus. He regards carriers of the diphtheria bacillus in the lower respiratory passages as particularly dangerous since they are unsuspected. In his opinion the examination of the sputum of many bronchitics would probably reveal a much higher incidence.

On Thursday March 25, 1920 the Department of Labor and Industry will hold its

Tenth Conference of Industrial Physicians and Surgeons in the State Capitol at Harrisburg. This conference promises to be of unusual interest as it will be the final day of a four-day Safety Congress held by this Department in which speakers of international prominence will participate.

A diffuse scarlatiniform eruption followed by desquamation in a soldier, the subject of chronic bronchitis and emphysema, after the administration of 6cg. Codiene, is reported by Roquier (Rev. Med. de l'Est). With a larger dose the eruption was darker and accompanied by the appearance of small bullae.

It is claimed by G. Maranon (Rev. Espan. de Med. y Cir.) that in hypothyroidism an erythema may be caused by slight friction of the skin of the neck with the finger. When a goitre is present the erythema may be confined to the skin over the tumor, or if the goitre is unilateral it may be more intense on the corresponding side. He claims to have found this in 92 out of 100 cases.

The Prodigal, who for the past ten years has had nothing to do but read, wishes someone to answer the following questions:

Why does normal menstrual blood not clot?

What is the significance of menstrual blood clotting?

Is the ovary a typical endocrine gland?

In what way, if any, does it functionate different from the other endocrine glands?

What are the physical after effects on a woman whose ovaries have been removed?

What are the psychological or mental after effects on a woman whose ovaries have been removed?

Does removal of the ovaries affect the thyroid? If so, in what way?

There has recently been sent out from the office of the Quartermaster General a list of surplus medicines and hospital supplies that are offered for sale to state and municipal hospitals, free clinics and similar institutions. We note in this list 19,500 pounds of pulverized acacia, 36,000 ounces of silver nitrate, 191,000 ounces of argyrol, 142,500 tubes of hypodermic tablets of cocaine, 110,000 ounces of collodion, 80,000 pounds of magnesium sulphate. There are o nhand according to this invoice in St. Louis and Washington, 25,596 bottles of compound cathartic pills, 1000 in each bottle, or 25,596 000 compound cathartic pills.

There is a surplus of 600,000 ounces of acetate of lead, and 360,000 ounces of protargol. There is a surplus of 86,500 pounds of aromatic spirits of ammonia.

R
Comments
BY THE PRODIGAL

The Journal, like wine, improves with age. In the January number you give us more pegs to stick in memory's wall to hang thoughts on than usual. A kind of cabinet kitchen where the cook can get at the needed utensils and material in short order. These medical reminders and tidbits of condensed information are immediate helps to the busy doctor. They are in usable shape and comeatable. They also mark the high places in the progress of medicine and keep the doctor in touch with the medical workaday world. This feature of medical jjournalistic condensation and paragraphing will meet with approbation by the profession, no doubt, and should be encouraged and continued. It is a helper in keeping posted. A dessert at the end of a hard day's work, or to the study of a complex and profound dissertation on the more intricate psychology of disease. It is one way of keeping posted and an important way, but it in no wise frees the doctor from the general reading and study of medicine and surgery and contributing his bit to the profession. It is a duty each doctor owes to his medical society as well as to himself—to prepare and read a well thought-out paper before his medical society at least once a year. He should take six months in the preparation of such a paper. It should be written out in full the first month and then pigeonholed for a month and let it get cold. Then take it out, read it, study it, add to or eliminate, or both, and rewrite it. Let it rest another month and repeat the effort, when a subject has been thought out and written out with such care, it will be a credit to the author, appreciated by the society and be worth while to the profession at large. The principal beneficiary, however, will be the author himself. The doctor who will do this will keep full of sap as he grows older and will not dotage so soon as the derelict.

SOCIETY NOTES. It is a pleasure for the Prodigal to scan the Society Notes although sombered by a shade of sorrow. A pleasure to see how readily and efficiently the younger generation of physicians takes upon himself the responsibilities and discharges the duties of the profession intrusted to it by the fathers. Also the progress they are making toward the higher

and better medical life. The absence of familiar names on roll call of the earlier burden bearers of the profession momentarily shades the spirit of joy, but for a moment only when he recalls that these changes are all definitely mapped out on the checker-board of time and that evolution is the price of progress toward the higher goal.

These society notes show that the doctors are on duty and ready on call. There is a desire on the part of the Prodigal and assuredly by the profession at large, that the secretaries of these societies put in these reports a short concise summing up or gist of the conclusions or findings of the papers or discussions on the subjects presented. It matters not so much that nothing new is presented, though desirable. The confirmation of the present practice, the disproving of supposed established empirical facts, or methods of doing old things in a newer or better way, are equally of interest. If the duties of the secretary at the meeting are too exacting to permit him to jot down the salient points of the paper and discussions, the chair should appoint some one of the members present to do this.

R

Fables for the Kansas Doctor

BY RENNIG ADE

Once upon a time there was a Kansas Doctor who did not belong to his state or county medical society. He could give no reason for this except that a physician he did not like belonged. Another reason he secretly held was, a man is not so likely to betray his ignorance if he keeps strictly to himself. His wife, who was a lady of finer sensibilities, felt the disgrace keenly and his children dreaded to go to school for fear their playfellows would taunt them with the fact that their father did not belong to the State Medical Society.

Some of the neighbors more charitably inclined called on the family on account of the wife, she as said before being a most estimable character. The Doctor's past life had been clean, the only thing derogatory being the rumor that he at one time had worn side-burns and a celluloid collar; this being a sartorial combination that no man could hope to live down. Fortunately it was never proven on him. In course of time by virtue of his professional isolation he became careless in dress and person and naturally slip-shod in his business methods. His desk became littered with papers. Cuspidors ran over the floor, speculiternated as tongue depressors and play-

things for children. His scientific knowledge likewise became hazy and indefinite and he spoke more frequently of the "prostrate gland" and catarrh of the stomach. By declaring himself against "cutting people up unless it was necessary" he established a following among those who did not wish to be cut up. This it might be said is a safe declaration for any practitioner to make and is especially recommended for the young man who is establishing a practice. It is even said by some to be a stronger card than talking loudly over the telephone in a public eating place. However both have their points with possibly the vantage in favor of the latter. Probably nothing will more lastingly nor startlingly impress the fastidious lady who is sipping her chocolate e clar nut sundae than to have the ambitious young Doctor rush hurriedly to the phone and inquire solicitously about Grandpa Smith's bowels. The conversation is carried on sufficiently long to give every one in hearing an intimate knowledge of, and a neighborly interest in, Grandpa's excretory functions.

In the smaller cities with no inside conveniences the case may be followed quite intelligently by friends and neighbors. But to return to our Doctor. He managed to get by for some time until one unfortunate day a flivver derailed itself and put a body scissors on Hank Jones on the side hill south of town. "Doc" was called and made a diagnosis of a fracture of both bones of the leg above the knee. This he certified to in Hank's accident policy blank. Three months later Hank got around with four inches of shortening and a leg so crooked he usually took the milk bucket when he started for the mail box as it was very uncertain what direction his leg would take him.

In due course of time Dos was sued for \$5000 damages, in spite of the fact men of Hank's calibre were quoted at about ninety-eight cents per dozen on the local exchange.

Then the Doctor looked around for something to lean upon. No powerful organization was at his call. No professional brethren rushed in to help carry the burden. No skilled council versed in this line of litigation was free for the asking. Instead he was compelled to employ an attorney who didn't know the os femur from the os cervix, and, after a lengthy expensive trial, a jury of twelve bovine eyed individuals, who had given their oath they didn't know anything and never expected to, brought in a verdict for the plaintiff in full.

The Supreme Court affirmed and the Doctor paid the bill.

Moral. Not all the barnacles are garnered by ships, nor is it necessary to go to the sea-coast to find "Dry Docs."

R

DEATHS

TAYLOR E. RAINES, Concordia, aged 67, died January 12 from spinal disease. Dr. Raines graduated from the Hahnemann Medical College, Chicago, in 1891. He was one time secretary of the board of medical registration and examination.

ADAM E. FOCHT, Great Bend, aged 60, died January 8 from heart disease. Dr. Focht was a graduate of Hahnemann Medical College, Chicago, 1885, and St. Louis College of Physicians and Surgeons, 1896. He was a member of The Kansas Medical Society.

GEOGE NELSON VAIL, Parker, aged 79, died January 6 from cerebral hemorrhage. Dr. Vail was a graduate of the University of Michigan, Ann Arbor, 1869. He was a member of the Kansas Medical Society.

EDWIN T. MYERS, Netawaka, aged 63, died January 23 from chronic nephritis. He was a graduate of the Western Reserve University, Cleveland, 1876. He was a member of the Kansas Medical Society.

JOHN B. DRAPER, Oswego, aged 77, died February 24 in Oswego. Dr. Draper was a graduate of Rush Medical College, 1868. He located in Oswego in 1869.

R

SOCIETIES

NORTHEAST KANSAS MEDICAL SOCIETY

The annual meeting of the Northeast Kansas Medical Society will be held in Topeka, Thursday, March 25. The meeting will begin at 1:30. The society will be entertained at dinner by the Shawnee County Medical Society. The following program has been prepared:

Some Aspects of Cholelithiasis—Dr. M. T. Sudler, Lawrence.

Lateral Sinus Thrombosis—Dr. L. B. Spake, Kansas City.

Treatment of Lowered Efficiency—Dr. H. J. Stacy, Leavenworth.

An Epidemiological Study of Influenza in Kansas—Dr. T. D. Tuttle, Topeka.

Acute Pancreatitis—Dr. J. W. Faust, Kansas City.

Cirrhosis of Liver—Dr. L. S. Milne, Kansas City.

The Pathology and Surgical Treatment of Peripheral Nerve Injuries—Dr. Robert D. Ireland, Rosedale.

Non-Specific Measures in the Treatment of

Syphilis—Dr. W. W. Duke, Kansas City, Mo.

Cardiospasm—Dr. W. O. Clark, Topeka
Hodgkin's Disease, Report of Case—Dr. D. D. Wilson, Nortonville and Dr. W. E. McVey, Topeka.

SHAWNEE COUNTY SOCIETY

The regular monthly meeting of the Shawnee County Medical Society was held Monday evening, March 1, at the Elks' Club. Dr. Chas. Louis Mix, Professor of Physical Diagnosis at Northwestern University and of the staff at Mercy Hospital, Chicago, presented an excellently prepared paper on "The Differential Diagnosis Between Duodenal Ulcer and Biliary Tract Infection."

Dr. Mix said in part: This subject is of great importance to both the medical man and the surgeon because so many of the cases are borderline. The three types of cases all have the same general symptoms and especial care must be given to differentiate them.

The symptoms presented in the three types of cases in general are: periodicity, pain, tenderness, nausea and vomiting, hemorrhage. Ulcer either of the duodenum or of the stomach occurs in the young, while biliary tract infection occurs later in life. The older a person becomes there is more liability of biliary tract infection. After the age of 82, half of the individuals who die, at post-mortem, show biliary tract infection.

The first main symptoms presented are periodicity and pain. Pain is a prominent symptom in all three conditions. In duodenal ulcer the first symptom is pain. There are usually time seizures averaging three to six weeks duration, but the attack may last longer, with remissions in midsummer and midwinter. While the patient is underweight, there is not a sudden decrease, and the underweight extends over a long period of time. The patient eats to relieve the pain for he is easier with food in his stomach. These persons also eat between meals and become "night feeders." In gastric ulcer there is a great loss of weight which is sudden and due to the tendency to keep the stomach empty. The person with a gastric ulcer will induce vomiting or develop the habit of using a stomach pump to keep the stomach empty. In ulcer the patient is able to definitely localize the pain and especially in ulcer of the stomach he is able to place his finger tip on the exact spot. In biliary tract infection the pain nearly always

radiates to the thorax, but such is not the case in ulcer. The pain is colicky in nature, due to the contraction of unstriped muscle. This pain is relieved by pressure, but peritonitic pain is aggravated by pressure. There is very little variation in weight. Tenderness is the next important finding and this is due to two causes, first the ulcer or the infection in the biliary tract, and secondly to the associated peritonitis. In ulcer of the stomach the tenderness is exactly at the point affected and can be definitely localized. In cases of ulcer of the duodenum the tenderness is never of a clear cut localization, it is in the epigastrium or to the right and over a fairly large area. The more tenderness there is, the more possibility there is of an associated peritonitis.

In cases of biliary tract infection the tenderness is usually in the right hypochondrium and farther over to the right as a rule. Sometimes there is only tenderness at the costal border, but great tenderness on first percussion.

Nausea and vomiting occurs to a certain extent in all three conditions. In duodenal ulcer in the early stages the patient does not vomit. With an associated peri-cholecystitis or peri-duodenitis there is vomiting that includes bile. In gastric ulcer with the location of the ulcer in the lesser curvature, vomiting is a prominent symptom, but only once at a time. When the ulcer is located in the fundus vomiting is rare. In biliary tract infection vomiting occurs in intermittent spells.

It must be determined in these conditions as to the presence of infection. The gall bladder forms a focus for the distribution of infection. If there is not an infection the probability of ulcer is very strong. Biliary tract infection is betrayed by an occasional symptom such as headache, involvement of one or more joints, bitter taste, "biliousness", occasional temperature. A coated tongue occurs in this condition but not in ulcer.

Hemorrhage may occur in either ulcer of the stomach or bowel. Bright red blood in the stool never means ulcer. A direct question as to the appearance of blood in the stool should not be asked. Blood in the stool is a black sticky mass and it has a very foul odor.

Icterus is not present unless there is a blockade of the common or hepatic ducts. Icterus preceded by pain is due to a movable body but when the pain occurs first then followed by icterus it means a neoplasm or inflammation.

The X-ray is of benefit in ulcer conditions. A meal of barium and buttermilk, followed by fluoroscopic examinations and picture (with the patient standing) at intervals of five minutes, 30 minutes and 5 hours, determine the extent of the duodenal cap, filling defects, hypermobility and contracted rings.

The laboratory findings likewise are valuable. Examination should be made for blood, bile and acidity. A cup of tea and 30 grains of milk sugar may be given, and then make tests for acidity at 30 minute intervals for 4 hours. The sugar usually disappears at the end of the third 30 minute interval. In biliary tract infection there is a mild leucocytosis.

In making a diagnosis 75 per cent depends upon the patient's history.

A large number of the members of the County Medical Society were present, as well as a number of out of town doctors.

The next regular meeting of the Shawnee County Medical Society will be held at Christ's Hospital, Monday evening, April 5th and the evening will be given over to the demonstration of clinical cases. Out of town medical men are cordially invited to be present.

EARLE G. BROWN, M. D.
Secretary.

R

BOOKS

American Illustrated Medical Dictionary (Dorland)

A new and complete Dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Tenth Edition, Revised and Enlarged. Edited by W. A. Newman Dorland, M. D. Large octavo of 1201 pages with 331 illustrations, 119 in colors. Containing over 2,000 new terms. Philadelphia and London: W. B. Saunders Company, 1919. Flexible Leather, \$6.00 net; thumb index, \$6.50 net.

There is perhaps no book which needs such constant revision as a dictionary, especially a medical dictionary. Medical writers, particularly, seem to vie with each other in the coining of words and the use of those recently coined. There are over two thousand new terms in this the tenth edition of Dorland's Dictionary, and it seems but a few months since the ninth edition was announced.

It is almost impossible for one to read intelligently many of the scientific medical articles that are appearing in the modern medical journals unless he have a late edition of a good medical dictionary at hand. The Dorland is one of the most convenient and the latest on the market.

The Medical Clinics of North America.

Volume III Number III (The Mayo Clinic Number, November 1919) Octavo of 296 pages, 79 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Published Bi-monthly. Price per Clinic year: Paper \$12.00. Clith, \$16.00.

Among the articles appearing in the November number of the Clinics, which will be read with a great deal of interest, are several discussions concerning the thyroid. The Chemical and Physiologic Nature of the Active Constituents of the Thyroid is the subject of a paper by E. C. Kendall. W. M. Boothby has a paper on the Basal Metabolic Rate in the Treatment of Diseases of the Thyroid. F. A. Willius discusses the preoperative Treatment of Hyperthyroidism.

T. L. Szlapka reports two patients with pernicious anemia alive more than three years after splenectomy. H. E. Marsh reports fifteen cases of erythremia. W. W. Bissell reports a case of primary portal thrombosis. G. B. Eusterman reports a case of syphilis of the stomach with observations and conclusions based on a study of fifty-five cases.

The After-Treatment of Surgical Patients,
by Willard Bartlett, A. M., M. D., F. A. C. S. and Collaborators. In two volumes with two hundred twenty-two original illustrations and one color plate. Published by C. V. Mosby Company, St. Louis.

Anyone who is in the least inclined to minimize the importance of the after-treatment of surgical cases should certainly read these books. Those whose surgical experience is extensive will fully appreciate the immense scope of the subject. The author discusses not only the after-treatment of the ordinary surgical cases, but the very many complicating conditions that may arise and the postoperative accidents that must be met with intelligence and skill. The book is especially well illustrated.

R

Postage on Specimens to Laboratory

The following letter has just been received by Acting Asst. Surg. B. K. Kilbourne, U. S. P. H. S., and the same reprinted in order that the members of the society may understand and observe this new ruling.

The Post Office Department has advised the Public Health Service that the use of penalty mailing slips for mailing specimens for Wassermann and gonorrhreal fixation test to laboratories in the various states engaged in the co-operative work for venereal disease control does not come within the regulations governing the use of the franking privilege, and has re-

quested the Bureau to take such steps as may be necessary to effect the discontinuance of this use of the penalty.

For your information, the following excerpt from the ruling of the Post Office Department is quoted:

"Under the law governing the exercise of the penalty privilege, embodied in section 496, Postal Laws and Regulations, it is permissible for officers of the Government to furnish penalty labels with return address to private individuals solely for the purpose of obtaining official information and endorsements relating thereto, such information and endorsements to be either written or printed. Penalty envelopes or labels may not, therefore, be furnished to private individuals to transmit in the mails without payment of postage specimens for diagnosis or any other matter except written or printed official information and endorsement."

You are therefore directed to discontinue at once the practice of furnishing to physicians and other return penalty slips for mailing specimens to any laboratory engaged in the co-operative venereal diseases control work. Steps should also be taken immediately to recall such penalty slips as have been furnished for this purpose. Payment of postage by the individuals mailing such material will be necessary in future.

You are directed to inform the Secretary or Executive Officer of the State Board of Health of this ruling by the Post Office Department, and to acknowledge receipt of this letter.

Respectfully,
(Signed) J. C. PERRY,
Acting Surgeon General.

R

Simple Therapeutics

The native doctors in some parts of Poland—who were also the barbers—had only one rule of practice when confronted with a patient who still showed signs of life. Is he sick? Bleed him! And they forthwith applied leeches. If the man got well, the barber-doctor had made a miraculous cure; if he died, it was the will of God.

Recently this ancient system of practice has been violently overthrown. American Red Cross doctors and nurses came into the district and found typhus and many other diseases flourishing, with no medical attention except that which the barber could bestow. An American hospital with all modern medicines and equipment was installed and the barbers soon lost the medical and surgical end of their practice. Their aid was enlisted, however, in closely

shaving bewiskered men and clipping short the hair of those who were infested with vermin. Just now, after weeks of strenuous campaigning, headway is being made against the disease which the barbers' leeches had so long failed to cure. Leechcraft has gone out of Poland.

R

Government Needs Physicians

The United States Civil Service Commission announces that a large number of physicians are needed for employment in the Indian Service, the Public Health Service, the Coast and Geodetic Survey, and the Panama Canal Service. Both men and women will be admitted to examinations, but appointing officers have the legal right to specify the sex desired when requesting the certification of eligibles.

Entrance salaries as high as \$200 a month are offered, with prospect of promotion in some branches to \$250, \$300, and higher rates for special positions.

Further information and application blanks may be obtained from the secretary of the U. S. civil service board at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle or San Francisco, or from the U. S. Civil Service Commission at Washington, D. C.

R

Why Tuberculous Persons Without Funds Should Not Leave Their Home States

It is reliably estimated that several hundred tuberculous persons without funds come to Denver every year. Practically all of them come because they have the mistaken idea that climate will cure tuberculosis.

They arrive, almost penniless, without having made any inquiries, or any provisions for their needs. Since Colorado has no state, and Denver no municipal tuberculosis sanatorium (merely a ward at the County Hospital for thirty-five very sick tuberculous residents,) the care of such indigent persons is limited to a few free private sanatoria, which are continuously so overtaxed that admittance is a long and difficult matter. These sanatoria comprise: the two Jewish, which accept only a small number of Gentiles; a tent colony of men with a capacity for seventy "down-and-outers"; and a small home for a dozen destitute tuberculous women.

These tuberculous poor who migrate to Denver, finding no place where they can be cared for, look for light work in order to maintain themselves and often their de-

pendent families; but the demand for such work is far in excess of the supply. Driven to any work they can get, with neither friends nor care, anxious, homesick, hopeless, they rapidly grow worse and usually soon die. They die for lack of proper rest, food, fresh air, and medical attention, those essentials of treatment, which many of them could have had at home—or here with sufficient funds for two years' care. Without these essentials climate is of no avail. If it were, Denver would welcome these tragic health-seekers instead of urging them, for their own best chances, to stay at home.

Denver also urges that the states throughout the country plan definite programs to retain their indigent tuberculous, giving them effective treatment in state sanatoria or in their own homes.

THE DENVER ANTI-TUBERCULOSIS SOCIETY,
221 Coronado Building, Denver, Colo.

R

Advantages of Handling Advertised Goods

There is a similarity between well-advertised goods and "coin of the realm". They are both standardized and therein is to be found the peculiar and chief value of each of them, says a booklet just issued by Armour and Company. To illustrate: A silver dollar is just so much metal plus the insignia of the United States Government. A lump of silver has an intrinsic value, to be sure, only you cannot spend it. Put the insignia on it and everybody will recognize its value and accept it in payment of debts.

"So it is with a package of merchandise," the booklet continues. "An advertised commodity must first be of uniform quality, else it would be the height of folly to advertise it; for there would be no repeat orders to pay for the advertising. Now add a trade-mark to this uniform quality. Then make the meaning of the trade-mark well known by advertising and you have a standardized product. This is what makes a good seller for the merchant. Everybody accepts the product on its face value, just as a person accepts a silver dollar on its face value. There is no uncertainty as to the worth of either."

R

Pituitary Extracts

The report of a study of the effect of the anterior lobe of the pituitary body on the growth of the genital tract by R. T. Frank, New York, is given in the Journal A. M. A., December 6, 1919. Previous investigators have reported different results from the

feeding of the anterior lobe extracts to different animals, and it has been generally held that it has an effect on the growth of the genital organs, and this view has sometimes been applied in the treatment of human patients. Four extracts of pituitary were obtained from Parke, Davis & Co.; Extract No. 1 of anterior and posterior lobe in proportion of 1 to 6 desiccated; Extract No. 2 of pituitary free from fat soluble substances; Extract No. 3 of pituitary containing only fat soluble substances; Extract No. 4 of the anterior lobe only desiccated and diluted with lactose to prevent decomposition. Six litters of white rats, raised in the laboratory of the George Crocker Special Research Fund, were used, all of them three weeks old when the experiments were begun. One of each litter was selected as a control. For thirty-five days each animal, except the control, was fed with 0.05 gm. of pituitary, given in a bolus composed of meat, egg and cream cheese. To round out the diet the animals were also given milk, greens and oats. All the animals, except No. 4 or litter 6, showed progressive increase in growth. At the necropsy it was found that no concordant increase in size or in general body weight, or in the genital organs was ascribed to the glandular feeding. Whether experimental or control, certain rats showed a greater increase in weight with presence of corpora lutea in the ovaries, and enlargement of the other internal genitals. According to Goetsch, animals of this age should show no corpora lutea unless stimulated by the extracts. The possibility of seasonal influence or special growth tendency in certain breeds is suggested by Frank in commenting on these statements. He says himself, in conclusion: "It may be said that more extended experiments along these lines will be necessary before stimulation of the sex organs, at least of the female sex organs, can be ascribed to the use of pituitary extracts. The practice of at once applying unconfirmed results obtained in the laboratory to clinical practice is pernicious. In no field has it been more abused than in that of 'endocrinology.' If this practice continues unchecked, organotherapy will fall into disrepute both in the opinion of the medical profession and in that of the public."

 R

. Aplastic Anemia

Aplastic or aregenerative anemia is defined by J. J. O'Malley and H. B. Conrad, Washington, D. C. (Journal A. M. A., December 6, 1919), who report a case, as well

as a well marked type of anemia, due to decreased blood formation, clinically marked by anemia, pronounced hemorrhage tendency and a rapidly fatal course. In spite of the severity of the anemia, there are none of the evidences of bone marrow regeneration, and at necropsy the red marrow is found to be aplastic, with an increase of fat and diminution of megaloblasts and normoblasts. The disease is not so rare. Musser has collected reports of fifty-nine cases, including twenty-four of Cabot, and one of his own. The case reported afforded a remarkable opportunity of observing the progressive changes of the blood. The patient, a man, aged 67, was received complaining of general weakness. He had been a moderate drinker for many years, had had a tendency to bleed from scratches, etc., and in 1910 had suffered from a "nervous breakdown" with pain over the sternum radiating down the right arm, but had recovered. He had also had enucleation of the right eye for glaucoma. Four months before the present admission the patient was in the hospital four weeks with "indigestion," and for about three weeks before the present admission he had tired easily. There was no emaciation, general muscular flabbiness was marked and the right side of his face was smoother than the left with the mouth drawn in the latter direction, but there was no special weakness of the right side. There was lateral nystagmus. The blood was pale and the red cell count was 2,240,000; the leukocyte count, 3,000, and the hemoglobin was 55 per cent (Tallqvist). All these points are mentioned in detail. The disease took a rapidly progressive course. Petechial hemorrhages appeared on the legs but disappeared after the first transfusions. Two transfusions caused no visible improvement, and the patient died on the nineteenth day after admission. In their comment on the case and its post mortem findings, the authors notice the advanced age of the patient, the slight fever which occurred, less prominent and significant than in most of the reported cases, and present only in the last four days of the disease. The blood findings tend to confirm the view that the anemia was due to decrease in formation and not to abnormal destruction of red cells. The authors' summary of this case is as follows: "In a case of aplastic anemia, the diagnosis was based on the anemia, the absence of abnormal red cells in the circulation, and the aplastic red marrow at necropsy. There was no evidence of in-

creased hemolysis. The red cells were reduced to about 1,800,000. They were only temporarily increased by transfusions, and they continued in about their original numbers to the end. The platelets were practically absent. The color index was below 1, and dropped as the disease progressed. There was an actual reduction in all the leukocytic elements of the blood, more marked in those of myeloid origin. Those of myeloid origin were the only elements to show progressive diminution in numbers."

R

Arteriograms

A. N. Donaldson, Loma Linda, Calif. (Journal A. M. A., December 6, 1919), having obtained indifferent results from the use of the Erlanger capsule for obtaining a bracial arteriogram, suggests the following as a substitute method: "A graduate, about 5 cm. in diameter, may be used and cut so as to secure a cylinder, 9 cm. long. The two ends are plugged with rubber corks, each perforated by a single opening. Glued in the hole in one cork is the stem of an ordinary Marey tambour; in the other cork is a short glass tube to connect the capsule with the recording tambour of the polygraph. On Marey's tambour is used one thickness of ordinary dental dam. This holds the pressure in the cuff and responds readily to brachial pulse changes." He has found that this arrangement and a pressure equal to the diastolic pressure in the cuff, gives most gratifying results, especially with nervous patients difficult to keep quiet. The article is illustrated.

R

Luxation of Lumbar Vertebra

While the dislocation of one vertebra on another has been mentioned as a possible cause of birth palsy, Emile Holman, Baltimore (Journal A. M. A., Nov. 1, 1919), finds in the survey of the literature no mention of such a case as he here reports. The child was brought to the Children's Hospital School in Baltimore with the diagnosis of spinal curvature. The mother was small in stature, with undersized pelvis, and this was her only living child from four pregnancies. The child when received at the hospital was 4 years, 8 months old, with evidently retarded development. The hips were well developed but the calves and feet were puny. There was a definite scoliosis to the right with a remarkable lordosis in the lumbar region at the level of the first and second vertebrae. The scoliosis

could be corrected with force, but the lordosis resisted complete reduction. The child could stand on a broad base by supporting himself on a chair. A roentgenogram showed a scoliosis of medium degree and laterally a distinct break in the normally regular alignment of the vertebral bodies occurring between the first and second lumbar vertebrae. There was no spina bifida. Souttar's operation to correct the extreme flexion at the hip was performed and the child was provided with a combined spinal and long paralytic brace which should with practice enable it to get about. While the possibility of lumbar vertebra dislocation has been considered doubtful the report of two authentic cases by Blasius has dispelled this doubt. No birth injury similar to this, in which the child survived, seems to be mentioned in the literature. The scoliosis could also be considered as a birth injury in Holman's opinion as there was no roentgenographic evidence of the anomalous conditions mentioned by Bohm, or of the wedge-shaped supernumerary vertebrae reported by Fitzwilliams and Norbury. Apparently, injury at birth is a cause of congenital scoliosis.

R

Juvenile Paretic

E. L. Hunt, New York (Journal A. M. A., Nov. 8, 1919), describes a case of juvenile paresis—a crippled and demented boy, aged 12, who, up to the age of 9, had been able to attend school, but after that was unable to keep up, and finally became too great a care to be left at home and was sent to the hospital. Treatment has been of no avail. The laboratory reported a markedly positive Wassermann test both in blood and spinal fluid, and butyric acid and colloidal gold tests were also positive. All the family were induced to take the Wassermann test excepting the father, who positively refused, and in all it was strongly positive.

R

Every sore throat is a danger signal, says the United States Public Health Service, and may indicate some acute, infectious disease, such as diphtheria or scarlet fever. Take no chances. Have a physician make an immediate examination. A few hours delay may cause death.

R

When a man begins to pity himself he is toboggan down grade.

Java instead of Peru is the quinine center.

THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, APRIL, 1920

No. 4

Empyema, Complicating Influenza

BY THOS. J. CARTER, M. D., WICHITA

Read before the Kansas State Medical Society at Ottawa,
Kansas, May, 1919.

There is no subject of more importance for the consideration of the medical profession at this time than that of empyema. This country has passed through a series of epidemics of so-called Spanish influenza. It had not been limited to any section, but has swept the country from the Atlantic to the Pacific, the consequence of which is the accumulation of a very large number of cases of empyema.

David Starr Jordan once said the time to study blackbirds is in blackbird time, and if we have not profited by this suggestion during this time, we have missed the most opportune time for the study of empyema.

I am not presenting this paper for the purpose of giving you a long list of cases that I might have treated or operated, or to present for your consideration some new form of technique, but rather to give a review of the recent literature, hoping that it will stimulate discussion that may be profitable to us all.

In previous years empyema was not a common complication of pneumonia, and we were surprised when there appeared amongst our patients such a large number of cases of empyema following broncho-pneumonia. Not only were the complications more common, but the mortality was also very high. We were at once convinced that we were dealing with an unfamiliar type of infection. So far as I know, no one has ventured to make a positive statement to explain the

cause of this high mortality, and the frequency of complications. Several theories have been advanced and extensive bacteriological investigations have been carried on in the different institutions of research and several base hospitals. A particular form of organism first suggests itself as a cause, but the bacteriological flora found were streptococci, pneumococci and staphylococci which are well known strains of pathogenic organism.

Reports seem to show a preponderance of the type of streptococcus which has the power of producing haemolysis, which seem to have an unusual toxic effect. The investigations so far fail to demonstrate that the bacillus influenzae is the causative factor. The frequency of its detection has not exceeded the frequency of its existence under normal conditions.

Alcoholism which has always been considered a predisposing factor in empyema cannot be claimed to be so in this epidemic. The young man and woman between the ages of 18 and 35 are most susceptible. The almost universal fatality in the pregnant woman also indicates that we are dealing with a new type of infection. The one fact that seems to stand out very plainly, namely, that robust adults are more susceptible than the very young or persons past 50. It is also interesting to note that persons affected with asthma, chronic bronchitis, and pulmonary tuberculosis are more often spared than the perfectly healthy.

In a report published in the December number of the bulletin of The Municipal Tubercular Sanitariums, of Chicago, of 1551 cases with pulmonary tuberculosis from six

institutions, only 85, or 5.4 per cent were affected with influenza, only 8 cases had pneumonia as a complication and only one case terminated fatally. It is also remarkable that the cases of glandular tuberculosis were more predisposed than the pulmonary cases.

Of the 154 glandular cases, 56.2 per cent contracted influenza. The author, in commenting upon this report, says, "Is it not likely that the secondary infection in tuberculosis, which is usually a streptococcus, is the immunizing factor in these tubercular individuals? Why should influenza spare the pulmonary tuberculous individual and not the glandular tubercular?"

The mortality rate depends somewhat on the severity of the attack. We have seen patients so overwhelmed by the infection that a fatal termination would come in 24 hours, and again, we have seen others that did not at first seem seriously ill die at the end of five or six days. But more often, when the patients stood the first shock and bridged over the first few days of illness, they had a good chance for recovery. As the patient's chance for recovery increased, there was always an increase in the leucocyte count. At the beginning of the attack, the leucocyte count was often as low as 4,000, and would gradually rise as improvement took place to 10,000 or 12,000. In fatal termination, the patient seemed to die from the lack of oxygen as well as from the toxic effect of the poison. The lungs became congested to such a degree that the air could not enter the vesicles and the patient died from suffocation as if from drowning. It is necessary, therefore, to look further for an explanation of the severity of the infection, the high mortality and the marked tendency toward complication.

If one sees a large number of cases of influenza, complicated with empyema, he is struck with the fact that they differ a great deal. Some correspond more to the type which we were accustomed to see in previous years, others are of a degree of severity which leads to a fatal issue in a short time. The noticeable fact attracting attention in

many of the patients is the early formation of a large amount of fluid; this is usually thin and contains traces of fibrin. The early recognition is not usually so very difficult, therefore it is unnecessary to discuss here the usual physical signs and the part of the history bearing upon the differential diagnosis. As soon as percussion and auscultation have convinced us that a certain portion of the chest has developed some form of complication, it is a wise procedure to have an X-Ray picture of the entire chest. The following conditions must be considered: Unresolved lobar pneumonia; acute bronchial pneumonia; fluid in the pleura, serous or purulent; lung abscess; pneumothorax; acute pulmonary tuberculosis. The correct interpretation of these pictures in the differentiation of the condition just mentioned is of paramount importance and for this reason should be referred to someone who is skilled in the reading of such pictures. After diagnosis of pleural effusion has been made, the pleural cavity is aspirated with a syringe, and specimen sent to the laboratory so as to be able to know which type we were dealing with. The frequency of aspiration depends upon the rapidity with which fluid accumulates. When the fluid causes serious embarrassment of circulation and respiration, as evidenced by dyspnoea, cyanosis and rapid pulse, it should be relieved very promptly by evacuating with an aspirator. This procedure should be repeated as often as indicated—if necessary, even daily. In rare instances this procedure may be even curative. Exceptions to this rule of non-operative treatment is made only in cases of acute progressive hydro - or - pyopneumothorax which results from the rupture of a sub-pleural pulmonary abscess communicating with a bronchus of considerable size. In these a very prompt operative interference is indicated. This recommendation of delayed operation is based on the marked improvement in the mortality statistics since the adoption of this course and also upon the very high mortality in camps in which operations were undertaken promptly upon

the discovery of the infected exudate. The most important advice given us by the commissions at the different cantonments in regard to the treatment of empyema during this stage is "not to operate." These are the practical reasons, but there are sound theoretical grounds as well. At an early stage of empyema the fluid is free within the cavity, and there are practically none, or only very slight, limiting adhesions; in other words, we are dealing with hydro-thorax, or if one chooses to call it, pyo-thorax. If an operation is undertaken at this stage, we convert the only slightly dangerous hydro-thorax into the extremely dangerous hyperacute pneumothorax. This brings about the justly dreaded fluttering of the mediastinum with ultimate fixation on the opposite side of the thorax; therefore, instead of attaining the desired object, namely to relieve the embarrassed respiration and heart action, the operation only aggravates it. There are a number of other, perhaps less important, reasons which favor a delayed operation; namely, the patients are usually very ill from pneumonia and with its attendant high toxicity, so that even the simple operation of thoracotomy, or rib resection, done under local anaesthesia, is badly borne. Dr. Miller, in his reports, states that many of his patients died promptly after the operation. The after treatment of early operation is extremely difficult; for instance, the institution of a permanent drainage by means of a trocar and subsequent introduction of a catheter. Even with the greatest precaution, air enters the chest sooner or later with a consequent collapse of the lung.

Attempts at maintaining a negative pressure have not been very successful. If a patient is fortunate enough to recover from the primary insult, there is usually formed an enormous cavity which requires a long time and numerous operations before final closure is obtained. In patients who are not operated upon at this stage, the exudate loses its seropurulent character and becomes converted into thick pus, and along with this change occur upon the pleural surfaces adhesions between portions of the pleura;

that is to say, the preexisting free seropurulent pleurisy has been converted into a closed purulent pleurisy, or empyema, shut in by adhesions. After the fluid has become purulent, it has lost a great deal of its virulence, or in other words, has become a cold abscess. We all know by experience the longer pus remains in a closed cavity the less toxic it becomes; therefore, it will be a reasonable conclusion to say that at this time would be the safer time to operate. Now, when this has been decided upon, the simplest method appeals to most of us as the one to be desired. In an article published in the August 31st, 1918, number of the Journal of the American Medical Association by Dr. Hugh McKenna, he advocates a method that I believe to be simple and effective. By means of a number 14 French rubber catheter and a trocar canula just large enough to thread the catheter into the pleural cavity. The catheter is then connected with a syringe and aspiration is intelligently and carefully carried out. If the pus is too thick for aspiration, a small amount of neutral solution of chlorinated soda (Dakin's solution) is allowed to run in. This solution quickly liquifies the pus so that by repetition of this procedure the entire cavity is emptied. The canula is withdrawn leaving the catheter in place, and one-half the number of cubic centimeters of Dakin's solution are allowed to run into and remain in the pleural cavity as corresponds to the quantity of pus aspirated during the operation. This procedure of aspirating through the catheter and the installation of Dakin's solution is repeated three times during the day and two times during the night. The advantages of this method are that it can be done under local anaesthesia and is distinctly a minor operation. It minimizes the possibility of contaminating the pleural cavity from without. The lung is not as completely collapsed as in the operation of costectomy or thoractotomy. Distressing sinuses are not so likely to follow and at the same time it has all the advantages of a more extensive operation. There is another method of procedure that is worthy

of consideration which was introduced by Dr. George Dohramann. His method consists of removing, under local anaesthesia, about one inch of the eighth or ninth rib posteriorly. The pleura is exposed and incised for about one inch. The index finger is introduced before the pus escapes, and pushed in through the cavity. A curved artery forceps is inserted along the finger and directed anteriorly and downward so as to find the lowest point of the empyema cavity. The tip of the forceps is then pressed against the inner chest wall so as to indicate the place for counter incision. After the incision has been made, a soft rubber catheter, about number 14, French, is grasped by the end of the forceps and pulled back through the two openings just made.

Before the catheter is introduced, several small openings are made in its middle portion. A larger rubber tube is then slipped over the catheter and introduced into the opening at the point of resection. The tube is then sewn to the skin so as to make it air tight. Connections are then made from the large rubber tube which drains the pus into a flask. The patient is placed in bed immediately in a recumbent position. At the end of four days the large tube is removed and the catheter left in place. After the catheter has drained from both ends for two or three weeks, it is ready to be removed. Before it is removed, a tape about one-quarter inch in width is attached to the catheter by means of a silk thread so that when the catheter is removed the tape is drawn in place. The tape is to be soaked in 20 per cent argyrol before being introduced. This tape is left in place until the discharge ceases.

This operation is more complicated than the one just described but reports of the end results have been very satisfactory and should simple drainage not accomplish the final results, this procedure should be adopted.

These cases usually heal very rapidly and within three or four weeks are entirely or almost well. If the condition is not remedied by this treatment after being carried

out faithfully, we will usually find one of the following conditions to exist: (1) Cases which are complicated by a large pleuropulmonary fistula. (2) Cases with retained foreign body. (3) Cases with secondary focus some distance from the original focus. (4) Cases with lateral branched sinuses. (5) Cases with necrotic rib.

As this paper has been written solely for the purpose of discussion of the acute empyema problem, complications will not be further discussed, and in conclusion, I believe: First, we are dealing with a new type of infection. Second, the treatment of empyema which has been caused by this infection, has become a new problem and has caused a revision of our old methods, namely, that in the early stages aspiration should be done to relieve undue pressure and operation delayed until after the fluid has become purulent. Third, that when one of these methods of operation is used, there is a less likelihood of a persistent sinus to form and above all, it is simple and easy to perform by anyone who is accustomed to operating.

R

The Treatment of War Amputated

THOMAS G. ORR, KANSAS CITY,
Major Med. Corps, U. S. A., Fort Des Moines, Iowa

With an estimated number of 400,000 amputated among the casualties of the nations at war it brings the subject of this type of disability very prominently before the medical profession.

Before the war the United States led in the production of efficient artificial limbs. The artificial limb was more highly developed here because of the more frequent loss of arms and legs in industrial accidents. At the beginning of the war there were more than 200 firms in the United States making limbs. European countries have shown a decided preference for the American made limbs in the treatment of their war amputated. This situation will probably not exist in the future since the number of amputated in this country is very small com-

*From the Orthopaedic Service of U. S. General Hospital No. 26, Fort Des Moines, Iowa.

pared to that of its allies who suffered most in the World War.

The surgeon appreciates more than ever before that co-operation with artificial limb makers is necessary for the best treatment of the amputated. The problem of making the patient's limb fit the artificial limb is to be as carefully considered as making the artificial limb fit the patient. Realizing this he has placed considerable stress upon the preferred sites for amputation. Opinions may differ slightly upon this subject but for the most part all are agreed.

A very brief review of the locations most suitable for amputation from the standpoint of suitable fitting of artificial prostheses follows. I think it is obvious to everyone that all hand parts possible should be saved that can be expected to properly functionate. If but one finger or thumb is left it can be made very useful by fitting the hand with one artificial finger to aid in grasping and picking up objects. A hook can also be used to great advantage in conjunction with one remaining finger or thumb. Amputations through the wrist joint do not make good stumps for fitting because the styloid processes are apt to become tender from pressure, a laced socket, which is an inconvenience, is required because the stump is larger at the end than above the wrist and a fitted artificial hand will hang lower than the opposite normal hand. These objections however may not be sufficiently great in all cases to warrant reamputation. Amputation just above the wrist gives a stump that will retain pronation and supination but is very apt to become atropic and cyanotic and produce discomfort. For a good working arm the best site for amputation is at the junction of the middle and lower thirds. Three inches of ulna are required for successful fitting of the upper forearm. If shorter than three inches the biceps tendon tends to push the bucket off the stump when the elbow is flexed. An amputation through the elbow joint is objectionable because of liability of tender condyles, inconvenient laced socket and the necessity of a wide unsightly artificial joint. For fitting

purposes a long upper arm is preferable to a short forearm. The best arm stump is amputated in the lower third just above the humeral condyles. A stump less than three inches long below the axillary fold is not very useful as a lever in an artificial arm. An artificial appliance with a shoulder cap can be successfully fitted to very short arms and disarticulations at the shoulder. Fitting at the shoulder is made easier when the humeral head is left to fill the glenoid fossa. The situation in the lower extremity is much different from that in the upper. Weight bearing and locomotion are the two factors to be considered. A single toe is usually troublesome and should not be left. Amputation through the metatarsals anterior to the insertions of the peronei and tibiales may make a very useful foot. At the ankle, of the classical operations of Pirogoff, Chopart and Syme, the latter is the only one of practical value. A good Syme can be fitted satisfactorily but probably with no more satisfaction than an amputation at the junction of middle and lower thirds of the leg. A seven or eight inch leg stump is the choice between the knee and the ankle. A leg stump as short as two inches can occasionally be used but with little leverage. The old "site of election" four inches below the knee, formerly intended for weight bearing with the knee in flexion, is now obsolete. The longer the thigh stump the better, providing the formal condyles are not included. The Stokes-Gritti operation properly done makes a very satisfactory end bearing stump. A thigh less than three inches long, measured from the pubes, has very little fitting value. Amputation through the neck of the femur or disarticulation at the hip is said to be preferable. There is still a great probability however that a useful leg will be made and satisfactorily fitted to these short thigh stumps.

A very large percentage of the amputated received in the hospitals of the United States have been operated upon by the guillotine method. Under the heading "guillotine" must be included all amputations without distinct flaps which have been left open

to granulate. A majority of these are unhealed and require reamputation or plastic operation before they can be properly fitted. This is especially true of the legs and thighs. Of 335 cases admitted to the hospital at Fort Des Moines from overseas 199 or about 59 per cent had guillotine operations. Of the guillotine cases 133 or 66 per cent have been operated upon or will require operation.

The guillotine operation is a resurrection of the World War. It has been used principally as a life saving measure and not as an operation of choice and carries with it the probability of a later operation. It lessens shock by short time operation, permits amputation at a lower possible level, decreases danger of infection and limits further infection, avoids impairment of circulation in flaps and thus prevents sloughs and probably diminishes risk of secondary hemorrhage. Gas gangrene or the expectancy of such and the severer types of pyogenic infection are the chief indications for the guillotine. To make a guillotine a really successful operation postoperative traction must be begun at once. This may be accomplished by the use of adhesive straps on the retracting skin with the weight and pulley or Thomas splint for traction apparatus. In quite a large percentage of the cases this should be continued over a period of several weeks. Efficient traction promotes healing, diminishes scar formation and conserves length of bone. With this method of treatment many flapless amputations will heal and an artificial arm or leg can be worn with comfort and satisfaction without further operation.

Reamputation or plastic operation on amputation stumps is indicated in cases with exposed granulating bone, large slowly healing end ulcer, adherent scars that are tender or prone to ulcerate, redundant soft parts, to improve the site for fitting and in rare instances for painful stumps.

When a stump is ready for operation is a question worthy of careful consideration. The ideal method would be to wait from three to six months after complete healing

and operate in a clean field. Such delay would hardly be practical for the returned soldier in a military hospital. Reamputation is safe and indicated when all oedema has disappeared from the skin and deep tissues of the stump. The disappearance of the oedema is shown by a decrease in the size of the part and the condition of the tissues, which have become soft and loose and can be picked up in soft folds between the fingers.

Chappel and Neve in England recommend early reamputation but we are convinced that such procedure is unwise, and in the end, makes a poorer stump than to wait until the oedema has completely disappeared. We have found that when stumps have been acutely infected with streptococcus it is better to postpone operation for several months regardless of the clinical appearance. Latent infection is present in lymph spaces about the wound, in the scar tissue of the skin and in the calcified bone granulations which are found in all infected stumps. There is another important consideration besides the danger of infection which is purely mechanical. Flaps can be more easily made, are more elastic and can be drawn further over the end of the bone when no oedema or induration is present, thus lessening the length of the bone to be removed to effect a flap closure.

In the preparation of the patient for operation the method outlined by the Orthopaedic Division of the Surgeon General's Office has been followed. When an unhealed stump has reached the proper state for reamputation it is thoroughly shaved and cleansed twenty-four hours previous to the operation and again on the operating table. Clean cases receive forty-eight hour preparation. A tourniquet may or may not be used. The ulcerated area and scar to be removed are painted with pure phenol. After the incision has been made around the area to be excised this area is covered with gauze secured by forceps to prevent wound soiling. The skin flaps depend entirely upon the available skin. If an oblique guillotine operation has been done there

can usually be fashioned one long and one short flap. In short stumps, especially those of the leg and thigh, the object is to make a good covering for the end of the bone with the sacrifice of a minimum quantity of good bone. In some cases a skin and fascia flap can be raised back some distance and drawn over the stump end. Whenever possible long anterior and short posterior flaps are made in amputations upon the lower extremity. In the arm equal length flaps are preferable. No attempt is made to cover the end of the bone with muscle. When possible the muscle is sutured about but not over the end of the bone. It is highly probable that better stumps are produced without a muscle covering for the bone. Witness the fact that nature has not provided muscle pads over such weight bearing bone surfaces as the heel, heads of metatarsals, knee and elbow. The nerves should be sought out and divided at least three cm. above the end of the stump. A number of methods have been suggested for the treatment of the severed nerve ends but high division and the absence of infection probably are the chief factors that make for the absence of painful nerve ends. How should the periosteum be treated? In re-amputation of short stumps which are ulcerated and have bone spurs and protruding granulations it is impossible to make a periosteal covering of the bone, even if desired, without the unnecessary sacrifice of bone. The periosteum should be removed one-half to one cm. above the end of the bone after the method of Bunge. By this method post-operative spurs are least likely to occur. Tearing the periosteum and thus forming loose periosteal shreds is studiously to be avoided. After the bone is divided the rough edges are removed. In the case of the tibia the tibial crest is removed one and one-half cm. back from the end of the bone. The fibula is always divided at least one cm. above the end of the tibia. Drainage is used in all cases. In some of the worst types of cases and in all cases where sequestra have been removed Dakin's solution is used.

An operation to lengthen short arm stumps is advisable in some cases. The insertion of the pectoralis major is partially or completely divided permitting the anterior axillary fold to be pushed upward from two to three cm. Some operators have advised the section of the insertion of the teres major and even the latissimus dorsi in addition to the pectoralis major thereby raising the posterior axillary fold. The operation of Openshaw, which consists in the removal of a portion of the muscles attached to the humeral condyles and epicondyles, is of value in selected cases of very short muscular forearm stumps to permit better fitting of artificial forearm bucket.

Skin grafting is hardly to be recommended in the treatment of unhealed stumps. A skin grafted stump can never be used for end bearing and in all cases ulceration is very apt to occur.

The preparation of stumps for fitting has been given much attention since the beginning of the reconstruction period. Contractures at the joint nearest the amputation must be carefully avoided by use of splints, correct posture and exercise. These contractures are especially likely to occur at the hip and knee. To make a patient comfortable in bed after amputation a thigh stump is usually placed on a pillow and a leg stump over a pillow, both positions if prolonged, tending to produce flexion deformities.

As soon as the wound is healed, or almost healed, massage and bandaging are begun. The stump and nearest joint are massaged and exercised. Rapid shrinkage of the stump is desirable to allow early fitting. This may be promoted by the use of the flannel bandage frequently applied. The best method of producing shrinkage is the early use of an artificial limb or temporary pilon. A peg leg with a plaster paris socket will reduce the size of a stump to a surprising degree in two or three weeks. Pressure exercises may be used to train the stump for end bearing by first making light pressure on a cushion, later on a harder surface and finally in a bucket of an artificial

leg. Active motion is encouraged as soon as the primary pain after operation has disappeared. Contrast baths are valuable and often used to improve the soft tissues.

According to Huggins, who has had a wide experience with the amputated at Roehampton and other hospitals in England, says: "An ideal amputation stump should be of such lengths as to enable the artificial limb maker to fit the most useful type of limb that he can make for the segment of the limb in which the amputation has been performed. It should be covered by skin and subcutaneous tissues, just slack over the end of the stump and freely movable. There should be no redundant skin and pointed corners. The scar should be a simple linear scar not adherent to bone. There should be no sinus in the scar and the edges should not be turned in. There should not be any pain or tenderness in the stump. A radiogram should show there is no necrosis of bone. The joint next above the amputation should possess a full range of voluntary motion. There should be no oedema in the stump either superficial or deep." In this connection it may be said that an ideal appearing stump is not always necessary for good function.

Weight bearing of the lower extremity stumps may be end bearing, partial end bearing or lateral bearing. Of these end bearing is the most desirable. This is most easily obtainable when the site of section has been through cancellous bone. The Syme, transcondylar of the femur and the Stokes-Gritti are examples of this type. Such stumps should be covered at operation with flaps of healthy skin and subcutaneous tissue. If the flaps are not too tight over the bone and sepsis is avoided nature will form a good pad of fibrous tissue from exudates that collect beneath. Partial end-bearing can be obtained in some cases by felt pads in the socket of the artificial limbs. These pads can be varied in thickness according to the weight that can be comfortably borne by the stump. In lateral bearing thigh stumps the weight is taken by the tuberosity of the ischium and soft parts around the

top of the thigh. The inner edge of the bucket must not be permitted to press against the pubic bone. In the lower leg the weight is carried by the lateral surface of the tibial tuberosities, the tibial tubercle and the lateral surface of the upper portion of the leg. Pressure on the head of the fibula is to be avoided.

The Government discharges patients with provisional artificial arms and legs only. The reason for this is two-fold: Stumps continue to shrink for several months after amputation and require refitting. It is obvious that an expensive permanent limb is not desirable. By the time a patient has learned to properly use an inexpensive prosthesis he is much better able to determine the kind of permanent arm or leg he prefers and which would be best suited for his particular kind of work. The provisional artificial limb is fitted as soon as the condition of the stump will permit. When the patient has learned to use and wear the limb comfortably he is discharged from the army on a certificate of disability. A permanent prosthesis is later furnished him by the War Risk Insurance Bureau.

1. Chapple.....British Med. Journal, Aug. 25, 1917, 242.
2. Neve.....British Med. Journal, Nov. 3, 1917, 583.
3. Huggins...Amputation Stumps, Their Care and Treatment.

IX

NON-SPECIFIC PROTEIN THERAPY IN HODGKIN'S DISEASE

W. E. McVEY, M. D., TOPEKA, AND D. D. WILSON, M. D., NORTONVILLE

Read before the Northeast Kansas Medical Society at Topeka, Kansas, March, 1920.

Report of Case—W. E. McVey

The following case was seen by me first on May 4, 1918, and was advised to come to the hospital for further observation and possible treatment. She entered the hospital May 6 and the following history was obtained:

Mrs. F. H., American, aged 37, housewife, father living at 79, mother died of cerebral hemorrhage at 76. One brother died of pulmonary tuberculosis. One sister living and in good health. Three brothers living and in good health. Menstruation began at 15 years of age and has had no menstrual difficulties. Was married at 25 years of age.

Has had two children and both are living. No miscarriages. Among her past illnesses we find she has had diphtheria, grippe, malaria, pleurisy. The history of her present ailment began with what seemed to be a slight cold which grew worse and developed into 'grippe.' Three weeks after the beginning of her cold her doctor found dullness in the left side and a quart of fluid was withdrawn. Three weeks later three quarts were removed. Temperature was normal or not over 99.5, only slight relief was obtained from withdrawal of fluid. Fluid negative for tubercle bacilli. Lost ten pounds in weight. Some improvement followed. Three months later went to Colorado because of supposed tuberculous infection. No improvement was observed after three months in Colorado and she returned home. About two weeks before she returned a small enlargement of glands on right side of neck was observed. This grew rapidly until it was as large as a teacup, gradually extending around to the left side which also became enlarged. The glands under each arm became swollen also. Lost weight rapidly. Appetite fair. Some trouble in breathing. X-Ray treatments were given which reduced growths. Gained rapidly in flesh and strength and the enlargements returned to their former size.

When she entered the hospital there were large masses on each side of the neck apparently extending well down beneath the clavicles. There was marked dyspnoea. There was no respiratory movement on left side. Vocal resonance and vocal fremitus diminished. Respiratory sounds indistinct except in small area near the axillary region. Marked dullness on percussion. Heart dilated and displaced downward. Temperature 100.2, pulse 108, respiration 24, blood—4600000 red, 8000 white.

An aspirating needle was introduced but no fluid returned through either of several punctures. X-Ray plate showed simply a marked opacity of the left side. The skin about the neck and upper part of the chest was much pigmented and there was a slight eruption—this was attributed to the X-Ray

treatments, and it disappeared to a considerable extent after a few weeks. A previous diagnosis of Hodgkin's disease had been made. We concurred in this diagnosis.

On May 8, 1cc of mixed typhoid vaccine was administered and on May 11 this was repeated. On May 14, 2cc were given and this dose was repeated about every third day until June 15. Eleven doses in all were administered. The temperature varied from 98.2 to 100.2, the pulse from 96 to 120 and the respirations from 16 to 30. There was no regularity in the variations. There were very slight or no reactions following the injections of the vaccine. There was improvement however in the growths. The first noticeable improvement was an increase in the respiratory area on the left side which continued to clear up until respiratory sounds could be heard, and a distinct vesicular murmur could be heard over a large part of the left lung. The enlargements in the neck began to diminish in size after the third dose of vaccine and continued to diminish until after she left the hospital. She left the hospital on June 20th. She was given iron, quinine and arsenic and the improvement continued for several weeks. About the first of September there was a slight increase in the size of the growths of the neck. But up to this time the general improvement had continued.

Report of Subsequent Treatment—D. D. Wilson, M. D.

On October 25, 1918, I was called to take charge of this case. This was done very reluctantly, for several reasons.

The history obtained at this visit was as has been stated, with the history of the past two or three months. The patient had remained in fair condition of health since treated by Dr. McVey and seemed to improve so much that she had resumed most of her household duties—which was against the advice of her physician. About October 1st, she began having a rise of temperature ranging from 100 to 102 degrees each day. She also noticed a return of the growths on both sides of the neck and in the axillae, which soon became as large as

at any previous time and extended farther in all directions.

Not having any knowledge of the treatment administered which seemed to have given her such marked benefit I asked for a conference with Dr. McVey. This was granted and it was decided to again administer typhoid vaccine.

The first dose, 1 cc was given on Nov. 9. No reaction followed. No special change noticed. The second dose, about 2 cc, was given on Nov. 17. Again no reaction. On Nov. 22, 2 cc of the vaccine was given and this was followed by slight chill and an elevation of temperature—104—lasting three hours. No change in outline or consistency of growths. On Nov. 26, she was given the first of a series of four injections of the increasing doses. Repeated Dec. 2nd, 4th, 6th, and 8th. These were followed by slight reactions with marked reduction of the growths and general improvement—appetite, etc. On Dec. 11th, she was given a maximum dose, also on the 14th and 17th. These were followed very rapidly by loss of size of tumors.

I might say that the last dose, Dec. 17th, was followed by a very sharp reaction, but 1-150 of atropine soon gave relief. On the 24th the growths had entirely disappeared and the patient was feeling very good indeed, in fact the external growths had all seemingly melted away like magic. During the period from Nov. 24th to Jan. 8th, there was gradual gain in strength and an increased appetite. She died very suddenly, soon after retiring, Jan. 8th.

This case has presented to me food for deep reflection. First because of the unknown etiology—or at least a lack of positive knowledge—of Hodgkin's Disease. Second, the celerity of the disappearance of objective pathology and otherwise marked improvement of the patient for a short period.

This should stimulate us to a deeper study of nonspecific therapy, which will no doubt lead us to brilliant results in the treatment of obscure conditions as well as those more definitely known.

BELL MEMORIAL HOSPITAL CLINICS

Out-Patient Clinic of Doctor Robert C. Davis

PRESENTATION OF A CASE OF EPIDEMIC CEREBRO-SPINAL MENINGITIS

This patient who entered the Dispensary today brings up a very interesting subject about which there has been considerable discussion in the diagnosis and treatment in the last two or three years. Our ideas of the disease both as to the diagnosis and treatment have completely changed within that time and it is these advances in the diagnosis and treatment that I wish to present.

Briefly the history of this case is as follows:

T. N. Colored, male, age 25, Case No., 17374; entered Dispensary walking with assistance; complains of pain in the head and weakness. Perfectly well up until one week ago, at which time he had a very slight cold and the next day some pain in the right elbow joint. Two days later a sudden headache in the occipital region, which patient describes as the most severe pain that he has ever had. He took medicine for "headache" but without relief. Patient did not wish to stir or be disturbed: seemed drowsy but was not delirious. At times last night he was restless. This additional history obtained from his wife. History otherwise negative.

As we see the patient this morning there is but little change in his condition from the history given above. Physical examination shows the following: Temperature 99.4; respiration 26; pulse 126; Eyes: right pupil dilated widely, left slightly, both regular in outline and react to light. A marked dilation of the veins of the temporal and frontal regions. Face appears slightly cyanosed especially the posterior part of the ears. I think that this would be more marked in the white. Over the chest and abdomen is a rash, petechial in character. The petechia raised slightly above the surface of the skin and do not disappear upon pressure.

The knee-jerks are increased, the right slightly more than the left. The abdominal and cremasteric reflexes increased but as far as able to ascertain are equal. There is no Babinski, the Kernig is suggestive but not positive; while the Brudzinski is only slightly positive. There is only a very slight stiffness of the neck and there is no pain in the back or neck.

The heart and chest are negative, as are other findings. Now with these findings we are justified in doing a spinal puncture, suspecting meningitis, of the epidemic type. However if the organisms are not found in the fluid of this first puncture it does not mean that our diagnosis is not correct. We will wait two or three hours and again puncture as the second puncture seems to bring down the organisms from above. A bloody fluid is obtained from the puncture. The blood is not due to the spinal fluid but to an injury to a vessel upon entering the canal. If the organisms are found at this time there will probably be a majority of them extra-cellular. Now while we are waiting for the laboratory report we will go ahead and discuss the diagnosis and treatment of Epidemic Cerebro-Spinal Meningitis. I am glad to be able to present this case to you today for at our next meeting in the classroom we are to discuss this disease.

Dr. Davis: Do you think this a case of meningitis?

Student: I do not.

Dr. Davis: Why?

Student: Well, because he has not the signs the text-book gives for meningitis and is not the picture that I expect to see with meningitis.

Dr. Davis: Describe what you would think a case of meningitis would resemble.

Student: He has very little stiffness of the neck, his Kernig is scarcely positive, his head is not drawn back and he has had no convulsions.

While my idea of meningitis was one that has all of these and some of them in the extreme. Then this patient walked into the Dispensary.

Dr. Davis: I was waiting for that picture that you have just described before starting the discussion. Because the general idea of the diagnosis of this disease seems to be one resembling that you have just described. If we wait for those signs and symptoms that you have just described to appear we are waiting entirely too long to give the patient the best treatment and we will not get nearly such results as if we diagnose our cases in the earlier stage. In fact from the picture you have just given anyone even the relatives will be able to diagnose the condition. It is this early diagnosis that I am trying to impress upon you today.

In the last two years we have recognized that the resulting meningitis is merely a secondary localization of a primary blood stream infection. And in the recognition of this fact we have completely changed our methods of diagnosis and treatment of the disease. That the disease is a primary blood stream invasion has been proven by obtaining the organism from the blood stream thru blood cultures; by obtaining the organisms from the petechia in the skin; and by obtaining the organisms from cases of arthritis and pericarditis as complications of the disease.

I will give a few of the findings upon which we make a diagnosis of Epidemic Cerebro-Spinal Meningitis.

The patient appears drowsy, resents examination, answers questions shortly, and is very sensitive to cold. There is a slight temperature, 99 to 101. There is a dilation of the veins of the face and especially of the temporal region with a cyanosis of the ears especially the posterior part. The reflexes are exaggerated and unequal. But the most important finding is a petechial rash over the body and chest that appears in crops and does not disappear upon pressure. Occasionally there is also purpuric hemorrhages into the skin. These usually denote the severe cases. Headache may or may not be present in the early stages. If present it is not always occipital; in fact more frequently frontal or temporal. It is described as bursting in character.

Of course before an absolutely positive diagnosis can be made it is necessary to find the organisms in the spinal fluid. At this time they are for the most part extra-cellular. The fluid is only very slightly cloudy but is under pressure.

Now if this is a case of meningitis of the epidemic type what is the treatment?

Student: Spinal puncture, draining off the increased fluid with the introduction into the spinal canal of 30 to 40 cubic centimeters of the antimeningitic serum, once or twice daily.

Dr. Davis. Is that all?

Student: Well the general symptomatic treatment as in other acute diseases.

Dr. Davis: Has anyone anything to add to what has been said about the treatment?

Student: I think that serum is sometimes given in the vein.

Dr. Davis: That is right. Now give us the technique, amount and indications for intravenous administration.

Student: I do not know but suppose similar to the treatment of Type 1 pneumonia.

Dr. Davis: The intravenous treatment is one of the important things in therapy brought out in the army. I was in the contagious wards of the base hospital where the use of the serum intravenously in large amounts was first tried out. By this method we were able to cut our death rate in half as well as to shorten the duration of the disease and to lessen the complications. Besides if these cases are diagnosed fairly early the patient is much more comfortable and is not subjected to a long course of spinal treatments which at best are more or less of a torture. It was due to the efforts of Dr. W. W. Herrick of New York that we first started using the intravenous serum in large dosage.

Briefly then the method is as follows: After testing out as to whether the patient is sensitive to the serum and finding that he is not, 90 to 120 cubic centimeters of serum are given in the vein. The first few c. c. should be given very slowly to guard against collapse. Usually before the administration of the serum a small dose of mor-

phia is given. If the patient is sensitized he must first be desensitized in the usual manner. The dose should be repeated in eight to twelve hours depending upon the response of the patient and the severity of the case.

In conjunction with this intravenous treatment the intraspinal drainage and introduction of serum is used. One indication for the discontinuance of the intraspinal serum is an increasing opisthotonos. The spinal punctures are continued as necessary for the relief of headache and all the spinal fluid possible is removed.

Results of Intravenous Treatment of Epidemic Meningitis: First, The use of serum intravenously in sufficient quantity lessens the death rate. Second, it diminishes the complications. Third, it shortens the length of the disease, and Fourth, it adds a great amount of comfort to the patient by shortening the course of the disease and lessening the number of spinal tappings.

Now in conclusion I wish to again emphasize the necessity of an early diagnosis of the disease; the use of a serum in sufficient quantity intravenously as well as in the spine and sufficient spinal drainage to relieve the patient.

Note: Doctor D. R. Black of the laboratory reports a Gram negative diplococcus both extra and intracellular which confirms the diagnosis of Epidemic Cerebro-Spinal Meningitis.

Clinic of Dr. D. C. Guffey

ABSTRACT OF CLINICAL CONFERENCE IN
GYNECOLOGY

Student Historian reading:

The patient, a white woman, 62 years old, married, entered the hospital on account of metrorrhagia, pain in the right lower abdominal quadrant and general exhaustion. The trouble began about eight months ago with a pressure on the bladder, causing great diurnal and nocturnal frequency of micturition. No hematuria. No other symptoms presented until about two months ago when pain, sharp shooting and intermittent

in character appeared in the right side. At the same time a tumor about the size of the wrist appeared in the right lower abdominal quadrant. The pain has now shifted to the left side and the tumor has rapidly increased in size to that of a cocoanut and extends beyond the mid-line. During these two months there has been a continuous metrorrhagia; hot flashes have returned (the menopause occurring 16 years ago), and dyspnoea developed. There has been no leucorrhea. The patient has rapidly lost strength and weight. The family history is negative. She is the mother of seven children.

Physical Examination: Temperature, 99; pulse, 104; respiration, 18. White woman about 65 years of age poorly nourished and very sallow. She does not seem in distress but is distinctly apathetic. The face is hollow, the eyes sunken, the lips pale, the skin dry and harsh, the muscles flabby, no adenopathy, the joints and reflexes negative. Eyes, ears, nose and throat negative. Teeth, false. Thyroid negative, lungs negative, slight systolic murmur over the apex, the rythm slightly irregular. The abdomen is fat and flabby. The right side is more prominent than the left, being filled with a large nodular mass extending from the symphysis to the umbilicus, the bulk of the tumor being to the right of the mid-line. The tumor seems to consist of two portions; one hard and firm, irregular in outline, the size of a flattened pear but indistinctly separated from the second portion which lies to the left and is distinctly softer in consistency. Both sections are very tender on pressure. The cervix is soft, high up to the right and jammed against the symphysis. Immediately posterior and filling the cul-de-sac is a mass, semi-solid in consistency—not as hard as the usual fibroid. The fingers can be passed a short distance upward between the cervix and the mass. Urinalysis, 1012; faintly acid, slight trace of albumin; no sugar; a few hyaline casts; many white and a few red blood cells, blood erythrocytes 3,260,000; haemoglobin 60-70 per cent; leucocytes 14,000; polymorphonu-

clears 78 per cent. Blood pressure systolic 140, and diastolic 80.

Instructor: What is your diagnosis?

Historian: Degenerated fibroma uteri.

Instructor: Complicated or uncomplicated?

Historian: Possibly complicated by a pyosalpinx.

Instructor: What are your recommendations?

Historian: Hystero-myomectomy and salpingectomy.

Instructor: The case is open for discussion.

A Student: Why do you make a diagnosis of a fibromyoma?

Historian: Because the tumor is hard, nodular, irregular in outline and apparently connected with the uterus.

A Student: Why do you say it has degenerated?

Historian: Because the patient has lost weight and is anaemic, also because the tumor has grown so rapidly and is softer than the ordinary fibroid.

A Student: Why do you think there may be a pyosalpinx?

Historian: Because of the leucocytosis, the slight increase in polymorphonuclear cells, the fever and rapid pulse, also because she is so tender.

A Student: You said there was no fever.

Historian: She said she had had no fever.

Instructor: How do you account for the rapid growth?

Historian: Degeneration, especially cystic or hemorrhagic, may cause a sudden increase in size. This might occur also if it is inflamed, especially if the tumor is infected or if the omentum is adherent.

Instructor: Do you think this is an ovarian cyst?

Historian: No I don't. There is no fluctuation and it is too hard and too irregular.

Instructor: What is the hard mass to the right?

Historian: That is a sub-serous fibroid.

Instructor: What is the softer mass to the left of this one?

Historian: That is the degenerated fibroid.

Instructor: What is the semi-solid mass felt behind the cervix?

Historian: I think that is a degenerated fibroid.

Instructor: It is too hard for the usual cyst. It is doubtful about fluctuation. By combined vaginal and abdominal examination there is a queer sensation of resiliency almost fluctuation. Fluctuation in a cyst, however, is not always obtained because of inaccessibility, multilocularity, or density of content as in a dermoid. It is too soft for an ordinary fibroid. It could be a large pyosalpinx, though it is not very tender. An old pyosalpinx or ovarian abscess, however, may lose much of its tenderness. The mass is about the consistency of a large mass of rolled up adherent and inflamed omentum.

A Student: Why is the cervix so soft and so high?

Historian: It is pushed up by the big mass in the pelvis.

A Student: Where is the fundus?

Historian: Incorporated in the tumor mass.

Instructor: If the large semi-solid mass is a cyst, where is the fundus?

Historian: I don't know. The hard mass high on the right side or the one in the pelvis might be it.

Instructor: Which mass feels more like a fundus?

Historian: The hard mass to the right in the abdomen.

A Student: Couldn't this be cancer of the uterus?

Historian: I don't think so. The cervix is smooth and not triable. There is no cancer there. The tumor is too large even for a fundus cancer; besides there has been no leucorrhoea.

A Student: How then do you account for the hemorrhage?

Historian: There has been no great hemorrhage, only continual bleeding, due to irritation of endometrium.

A Student: How do you account for the bladder irritation, the hot flashes, and the dyspnoea?

Historian: The bladder irritation is due to pressure; the hot flashes to some ovarian irritation and the dyspnoea to anaemia or the size of the tumor.

Instructor: What are the important points requiring an explanation?

Historian: (1) The tumor itself, (2) the anaemia, (3) the white cells, (4) the pain, (5) the loss in weight, (6) the metrorrhagia, (7) the fever and pulse rate.

Instructor: What possible explanations are there?

Historian: (1) Degenerating Fibromyoma uteri with a pyosalpinx, (2) Fibromyoma complicated by an ovarian cyst or ovarian abscess, (3) Fibromyoma undergoing carcinomatous transformation, (4) Malignant ovarian cystoma.

Instructor: Will anyone of these four possibilities suggested, when taken alone, explain the seven points named?

Historian: My diagnosis will. Possibly a malignant ovarian tumor might also.

Instructor: What kind of an ovarian tumor?

Historian: An infected ovarian cyst, a malignant papilloma, or a carcinoma.

Instructor: It would account for the anaemia, the loss of weight and the metrorrhagia; but it would not grow to such an enormous size nor would it grow so rapidly; besides it should be associated with an ascites, and there is no ascites.

Instructor: Would an ovarian papilloma explain everything?

Historian: Yes, they grow very rapidly; but usually occur in younger patients.

Instructor: Is a sarcoma a possibility?

Historian: Yes; but they too usually occur at an earlier age.

Instructor: True, but we had a case of ovarian carcinoma in a patient named Susie Davis where the findings were nearly identical with these. Probably a Krueckenberg tumor.

Instructor: How would you answer this statement: "I believe the symptoms for which this patient seeks relief are due to one of the following conditions named in the order of probability?"

Historian: (1) Degenerated fibromyoma uteri with pyosalpinx. (2) Malignant ovarian cystoma. (3) Fibrosarcoma.

Instructor: And this one. "I place most stress upon the following signs and symptoms in the order named."

Historian: (1) The tumor, (2) the rapidity of growth, (3) the blood findings, (4) the uterine hemorrhage.

Instructor: Why do you advise an operation?

Historian: Because I believe this patient has a definite pathological condition which can be removed by an operation and that its removal will cure her.

Instructor: Even if it can not be removed are we duty bound to give her a chance by making a reasonable and conservative effort?

Historian: Certainly.

Instructor: If all agree and there are no further questions or suggestions we will operate in the morning at 9 o'clock and continue our discussion at the next conference.

R

Differences in Pathology of Pandemic and Recurrent Forms of So-Called Influenza

The data analyzed by Douglas Symmers, Morris Dinnerstein and A. D. Frost, New York, (Journal A. M. A., March 20, 1920) were obtained from cases occurring in New York City. The first recurrent epidemic of so-called influenza in New York presented anatomic variations from the pandemic disease of a year before, (a) in the form of frequent and widespread inflammatory involvement of the pleura characterized by semipurulent and purulent exudates occurring in immediate association with pneumonic changes; (b) by multiple small pleural or subpleural abscesses; (c) by purulent infiltration of the interlobular and interlobular pleura, and (d) by solitary, oftener multiple, discrete or confluent intrapulmonary abscesses varying in size from a few millimeters to several centimeters. In the pandemic disease of 1918, the participation of the pleura in the pneumonic process was conspicuous by its rarity. In the recurrent epidemic, pleural involvement occurred in 60 per cent of all cases; and in 40 per cent purulent or semipurulent effusions were present. In the epidemic of 1918, intrapulmonary abscesses were virtually unknown accompaniments of the pneumonic process. In the recurrent epidemic, they were encountered

in 35.5 per cent of all cases. Of the total number of cases attended by pleural involvement (twenty-seven in all), multiple small pleural or subpleural abscesses occurred in twelve, or in 42.4 per cent. As a result of the recurrent disease, sequels may be expected in the form of (a) organization of the inflamed pleural membranes with partial or complete obliteration of the cavity and interference with the excursions of the corresponding lung; (b) delayed, diffuse or sacculated pleural or interlobar empyemas; (c) fibrosis of the lung following organization of exudate in the interlobar and interlobular septums of the pleura, and (d) gangrene of the lung and bronchiectatic cavities following secondary changes in intrapulmonary abscesses. In the epidemic of 1918, pneumonia was virtually constant, both in point of incidence and in conformation to type. In the recurrent disease, pneumonia was a relatively infrequent event, and the anatomic vagaries in the distribution and structure of the lesions were so numerous that no two sets of lungs were similar in appearance, and often one lung differed markedly from its fellow of the opposite side. In the pandemic disease of 1918, acute degenerative changes in the heart, muscle, liver and kidneys were neither frequent nor intense. In the recurrent disease, they were both common and severe.

R

Incarcerated Hernia Into Umbilical Cord

William J. Stanton, Washington, D. C., (Journal A. M. A., March 20, 1920), reports the case of a girl baby, weighing 8 pounds at birth, who presented a large tumor mass about the size of a fist, within the umbilical cord. Transillumination revealed coils of intestine. A diagnosis of hernia into the umbilical coil was made, and immediate operation was advised. This was at first refused, but next day the patient consented, and the author operated just twenty-four hours after the birth of the child. The wall of the sac consisted of amnion and peritoneum. The sac contained about 2 feet of large and small intestine. The appendix, though present, was not removed. The intestine was adherent over about half the surface of the sac. The intestine was beginning to show a dark reddish discoloration. An incision of the umbilical ring and abdominal wall above the cord was made. The intestine was replaced and the wound closed with three silkworm-gut inverted mattress sutures. The baby suffered little if any shock, and made an uneventful recovery.

THE JOURNAL
of the
Kansas Medical Society

W. E. McVEY, M.D. - - - **Editor**

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The Annual Meeting

The Place—Hutchinson.

The date—Wednesday and Thursday, May 5 and 6.

Hutchinson is easily reached from nearly every part of the state, the hotel accommodations are ample, so that the attendance should be unusually large. The program speaks for itself and should be sufficient attraction for all who can possibly leave home.

It has not seemed to matter much whether our annual meetings cover a period of two days or three days, the sessions are always crowded with work, the scientific program is finished in a grand rush and the House of Delegates always leaves something undone or imperfectly done.

More of the time of the Society—not the House of Delegates, but the Society—should be devoted to matters that intimately concern the welfare of the profession. Especially to discussions of ways and means which the society may be made more serviceable to its members.

There is now no room for argument on the proposition that the function of our society should no longer be purely a scientific one. Its possibilities for service in

other directions has already been demonstrated by our Defense Board. It took three years, after the plan was first proposed, to secure final action creating our defense fund. The success of that effort on the part of the society to extend its benefits should encourage the members to add other functions that may be performed at slight expense, but of inestimable benefit.

The council at its last meeting authorized the establishment of a credit and collection bureau for the benefit of the members of the society only. When they fully realize how far reaching the benefits of such a bureau may ultimately become there will be no hesitancy in taking advantage of it. The Merchant's Associations have used a similar plan for years and have practically eliminated the "won't pay" class of customers from their books. Our bureau will also be able to do this, but the medical profession has always recognized a certain obligation to those unfortunate ones who are willing but unable to pay. So that while the merchant has but one class of non-pay customers to consider we have two classes—the "won't pay" and the "can't pay." There is no question as to how best to deal with the former, but the future attitude of the profession toward those who can't pay should receive some very careful consideration. There is no sufficient reason for the medical profession bearing this burden, but how it may be shifted to the shoulders of the municipality, the county, or the state, requires some careful thought and cautious planning.

There could be no better time than during the annual meeting to discuss the plans which have previously been discussed in the Journal, for larger and better county societies. There are many facts that might be presented and many plans that might be suggested for the strengthening of our organization.

At every annual session of our society a time should be specified and program prepared for a meeting of the county secretaries. We have a few—several perhaps—very active and efficient secretaries. If these

men would disclose some of their plans to the less experienced ones, if they could transfer a little of their enthusiasm to the discouraged ones, or put a little life into the dead ones, such a meeting would be well worth the time and trouble.

R

MEETING OF KANSAS MEDICAL SOCIETY

May 5th and 6th, 1920. Chamber of Commerce, Hutchinson, Kansas

Committee on Arrangements—Dr. G. R. Gage, Dr. J. H. Schrant and Dr. G. A. Blasdel.

Committee on Entertainment—Dr. H. G. Welsh, Dr. J. H. Duvall and Dr. R. Y. Jones.

Entertainment—Wednesday, May 5th, at 8:00 p. m., banquet given by Reno County Medical Society.

Meeting of the Council—The Council of the Kansas Medical Society will meet at the Chamber of Commerce, Wednesday, May 5, at 8:30 a. m.

Meeting of the House of Delegates—House of Delegates will meet at the Chamber of Commerce, Wednesday, May 5th, at 4:00 p. m., and the following order of business will be observed:

Reading of minutes of last meeting.

Reports of Secretary, Treasurer and Councilors.

Report of Standing Committees.

Report of Special Committees.

Report of Committee on Arrangements.

Unfinished Business.

New Business.

Thursday, May 6th.

Meeting of the House of Delegates at 8:30 a. m.

Election of Officers.

President.

Three Vice-presidents.

Secretary.

Treasurer.

One delegate to A. M. A.

Councilor for the Fourth, Fifth, Ninth and Tenth Districts.

One member of the Medical Defense Board.

Program

Wednesday Morning, 9 O'clock.

President's Address, Dr. Elmer E. Liggett, Oswego.

"Tonsillectomies," Dr. L. B. Spake, Kansas City.

"The Diagnostic Value of Certain Abdominal Symptoms," Dr. C. W. Lawrence, Emporia.

"Erythrocythemia Rubra—report of case," Dr. W. A. Baker, Leavenworth.

"Epilepsy." Dr. O. S. Hubbard, Parsons.

"Obstetrical Experiences of the Country Physician," Dr. O. E. Stevenson, Labette.

"Operative Treatment Rectal Fistula," Dr. C. W. Hall, Hutchinson.

"Tubercular Peritonitis—with Special Reference to Cases Involving the Pancreas," Dr. R. C. Dugan, Ottawa.

"Uleer of the Stomach and Duodenum," Dr. W. D. Storrs, Topeka.

"Water both Before and After Operations," Dr. G. S. Lambeth, Iola.

"Chorea," Dr. Lucena C. Axtell, Newton.

"Fractures of the Spinal Column with Injury to the Cord," Dr. C. A. Smith, Pittsburgh.

(X-Ray slide demonstration.)

"Proteinosis," C. R. Lowdermilk, M. D., Galena.

Wednesday Afternoon, 2 O'clock.

"The Principles of the Fourth Era of Surgery," Dr. Robert T. Morris, New York.

"Present Day Operative Procedures in Obstetrics," (Lantern slide illustrations,) Dr. Jno. Osborn Polak, New York.

"Symposium: The Doctor and the Hospital."

"The Small Hospital," Dr. T. A. Jones, Hutchinson.

"The Right to Health," Mr. Jno. G. Bowman, Chicago.

"The Doctor and the Hospital," Dr. L. H. Burlingham, St. Louis, Mo.

"The Profession and the Public; A Plea for Closer Relationship," Dr. H. C. Embry, Hoisington.

"Industrial Diseases," Dr. J. W. Graybill, Newton.

"The Duties of a Full Time Health Officer," Dr. E. G. Brown, Topeka.

"Visceral Syphilis," Dr. Howard E. Marshbanks, Pittsburgh.

Thursday Morning, 9 O'clock.

"A Revolution in Gyneeological Practice," Dr. Frances A. Harper, Pittsburgh.

"Surgical Infections of the Kidney," Dr. R. W. James, Winfield.

"Psychotherapy," Dr. J. H. Cooper, Topeka.

"Episiotomy as a Preventative of Severe Laceration during Delivery," Dr. Leslie Leverich, Kansas City.

"Poliomyelitis," Dr. E. O. Ebright, Wichita.

"Caesarian Section Under Local Anesthesia—Report of Three Cases," Dr. W. E. Mowrey, Salina.

"Syphilis, the Nervous System and the General Practitioner," Dr. Karl Menninger, Topeka.

"Erysipelas Complicating Otitis Media—Reporting a Case," Dr. H. L. Chambers, Lawrence.

"Surgical Treatment of Bile Duct Infections," Dr. L. O. Nordstrom, Salina.

"Postoperative Parotitis," Dr. C. C. Hawke, Winfield.

"Operative Obstetrics," Dr. Geo. R. Little, Wichita.

"Head Injuries," Frank McKinney, M. D., Galena.

Thursday Afternoon, 2 O'clock.

Report of Neurology Committee, Dr. Elmer E. Liggett, chairman.

"Complications of Influenza," Dr. L. S. Milne, Kansas City.

"Transfusion," Dr. P. M. Krall, Kansas City.

"Peripheral Nerve Injuries and Their Repair," Dr. Dean Lewis and Dr. L. J. Pollock, Chicago.

"Closure of Cranial Defects by Osteoperiosteal Grafts," Dr. C. C. Nesselrode, Kansas City.

"Tumors of the Small Intestine—With Report of a Case," Dr. M. T. Sudler, Lawrence.

"Gall Bladder Diseases," (slides) Dr. H. L. Snyder and Dr. H. H. Jones, Winfield.

"What Not to Do in Bone Surgery," Dr. H. L. Regier, Kansas City.

Paper, (subject later), Dr. M. F. Russell, Great Bend.

The program will probably be re-arranged slightly.

HUTCHINSON HOTELS.

Bisonte—60 rooms, American plan, \$4.50 to \$6

Chalmers—64 rooms, European, \$1.00 to \$2.00

Midland—65 rooms, European, single, \$1.25 to \$1.75; double \$2.00 to \$3.25.

Reno—33 rooms, European, \$1.00 to \$2.00

There are many good restaurants in the city. If necessary rooms will be provided outside of the hotels.

HUTCHINSON TRAIN SCHEDULE.

ARKANSAS VALLEY INTERURBAN RAILWAY

Local leaves Hutchinson—6:10 a. m.; 7:50 a. m.; 10:20 a. m.; 1:20 p. m.; 3:20 p. m.; 5:20 p. m.; 6:20 p. m.; 9:20 p. m.; 11:20 p. m.

Limited leaves Hutchinson—3:50 a. m.; 11:50 a. m.; 2:20 p. m.; 4:20 p. m.; 7:50 p. m.

SANTA FE.

Eastbound.

No.	2 dep	3:05 p. m.
No.	4 dep	3:58 p. m.
No.	6 dep	11:35 a. m.
No.	10 dep	9:00 a. m.
No.	12 dep	12:50 a. m.
No.	566 dep	12:10 a. m.
No.	558 ar	4:45 p. m.
No.	508 ar	2:35 p. m.
No.	74 dep	11:47 p. m.
No.	8 dep	12:10 a. m.
No.	563 dep	12:55 p. m.

Westbound.

No.	1 dep	6:35 p. m.
No.	3 dep	3:40 p. m.
No.	5 dep	5:55 p. m.
No.	7 dep	4:13 p. m.
No.	9 dep	4:35 a. m.
No.	567 dep	8:50 a. m.
No.	557 dep	9:10 a. m.
No.	78 dep	10:20 a. m.
No.	77 dep	7:00 a. m.
No.	11 dep	3:55 a. m.
No.	565 dep	4:50 p. m.

MISSOURI PACIFIC.

Eastbound.

No. 404 dep	10:10 a. m.
No. 496 dep	12:10 p. m.
No. 434 dep	10:10 a. m.

Westbound.

No. 433 dep	9:35 a. m.
No. 495 dep	11:40 a. m.
No. 403 dep	5:10 p. m.

ROCK ISLAND.

Eastbound.

No. 4 dep	11:15 a. m.
No. 336 dep	12:48 p. m.
No. 2 dep	10:55 p. m.
No. 80 dep	12:15 p. m.

Westbound.

No. 1 dep	6:15 a. m.
No. 335 dep	3:53 p. m.
No. 3 dep	5:10 p. m.
No. 81 dep	1:40 p. m.

ETCETERA

"In the treatment of tuberculosis there must be prescribed not medicine, but a mode of life."

"The most notable cases in the successful treatment of tuberculosis are those treated psychically."

A good plan to pursue in the treatment of tuberculosis in a restless neurotic patient, who will not remain quiet in bed is to break his leg. (?)

It is said that the normal temperature of a man may be as low as 97.8 degrees F. in the morning and as high as 99.5 degrees F. in the evening.

Vietor C. Vaughn says: "The sanitary engineer is better fitted in the study of disease prevention than are graduates of medical colleges."

A teacupful of hot water taken every hour until free diuresis is procured is the best diuretic. To overcome the brackish taste of the hot water add a little sugar and cream.

The dietitian is better prepared to treat disease than the average doctor. These statements are common. Is there truth to warrant such statements?

It is 50-50 in the style of eating which does the most harm; to eat food badly prepared or to eat too much of food properly prepared.

Bushnell says that tuberculin in the treatment of tuberculosis is a terribly deadly weapon in the hands of the ignorant.

Simple Goiter can be prevented according to Kimball and Marne, by taking 2 grm. sodium iodide in .02 grm. doses each school day. It is especially indicated in school girls.

The Medical Society of the State of New York has refused to adopt a resolution censuring its medical counsel for appearing in defense of one of its members who had been charged with violation of the Harrison law. As we interpret it, this action by no means condones an offense against the law, but recognizes an old principle that one should be regarded as innocent until proven guilty.

The physicians of New York have not followed the lead of the Chicago men in announcing a new schedule of fees. Although a general advance in fees has been made it is an individual matter, each physician determining the value of his own services.

The annual convention of the National Anaesthesia Research Committee will be held in Pittsburgh the week of October 4, in conjunction with that of the Inter-State Anæsthetists' Association and the Pennsylvania Medical Society. Prizes aggregating \$200 are offered by the Society for the best papers on original research in anaesthesia, such papers to be read at the annual meeting. This offer is open to all surgical, medical and dental students, and practitioners in the United States.

Armour and Company have added 5 grain tablets of Corpus Luteum, Ovarian Substance, Anterior Pituitary Substance, to their list. These tablets are packed in bottles of 50 and are labelled "5 grains". Each tablet contains 5 grains of the desiccated glandular substance each grain of which represents a quantity of fresh tissue.

Dr. Hugh S. Cumming, Surg. Gen. U. S. P. H. S., has calculated the loss of man-power due to sickness in the United States. He says:

"In the United States in a normal year, for each person gainfully employed there is a loss of nine days due to sickness, a large part of it being preventable. There were approximately 290,000 deaths from pneumonia in the United States in 1918. For every death from pneumonia in the United States we count 125 sick days. There were over 13,000 deaths

from typhoid fever. A death from typhoid fever corresponds to a loss of from 450 to 500 sick days. There were over 150,000 deaths from tuberculosis. A death from tuberculosis corresponds to slightly more than 500 sick days among whites and slightly less than this among colored."

A new dark room and viewing light is being made by the Victor Electric Corporation. It is easily adjusted so that it can be directed at any angle. The ruby screen may be lifted so that the ground glass housing becomes available for viewing negatives. The light may be adjusted to the intensity required so that there will be no loss of plates from fogging.

W. J. Dobbie of the Toronto Free Hospital, Weston Ontario, says: (Am. Rev. Tuber.) "The young child must be absolutely protected against infection: to such an extent, indeed, that he would advocate the following two radical measures, (1) A tuberculous mother must not be allowed to come in contact with her child during its first three years and (2) If the father is tuberculous he should not live in the house so long as there is in the house an infant under three years of age. While immunity is being developed, older children should be carefully protected against disease. We should adopt a more rational attitude toward the adult consumptive. Needy consumptives should be provided with maintenance assistance, not only in institutions, but also at home. The incorrigibly careless patients should be detained in institutions.

Dr. Regina Flood Keyes, of Buffalo, New York, an American Red Cross physician who has lived in the Balkans for several years and who has been decorated by the French, Greek and Serbian Governments for operations performed under heavy bombardment, attributed the backwardness of the Balkan people to two causes, "sand-fly" fever and malaria.

"The Red Cross fight against typhus, small-pox, cholera and sex diseases in the Balkans attracts much attention in the press," says Dr. Keyes, "but our real work out here is the struggle to down malaria. More British soldiers died or were incapacitated by malaria in the Struma valley during the war than were killed in the taking of the Grande Couronne.

"The whole littoral of the eastern Adriatic from Fiume down to Avlon is a hot bed of malaria and 'sand-fly' fever while the northern shore of the Aegean from Salonica to Constantinople is even worse.."

"What we need in this country," said

General Wood, "is a sound national department of public health, a health bureau with a medical man at the head of it as a member of the cabinet. It doesn't make any difference who establishes it. It is a thing that is bound to be done. Our public health service is now scattered through a dozen different departments under as many different heads. What we need is one centralized department, nation wide in scope, to take care of all national problems of health and sanitation."

Barbital (Veronal) Addiction.—The constant use of even small doses of barbital (veronal) affects the central nervous system. Those taking the drug habitually become much debilitated and seem less able to stand moderate doses. Death has occurred from a 3 gm. dose in addicts. (Jour. A. M. A., Feb. 21, 1920, p. 544.)

Du Pont Cotton Process Ether.—Recently the "News Service" of the E. I. Du Pont De Nemours and Co., Inc., circularized the press of the country with a "filler" about "The New Du Pont Ether." The Du Pont Ether and the claims made for it are seemingly based on the work of one man, James H. Cotton, M. A., M. D., Toronto, Canada, who published an article on "Cotton Process Ether and Ether Analgesia." However, Cotton did not give the composition of the "New" ether, nor does his work appear to have been corroborated. In reply to an inquiry from the Secretary of the Council on Pharmacy and Chemistry, the Du Pont Chemical Works declared that the "procedure of manufacture, and the exact composition" of the ether was regarded as confidential information. The use of a therapeutic agent of unknown composition is unscientific and contrary to the best interests of the medical profession and the public, but it is many times more serious for physicians to use a secret or semi-secret substance as an anesthetic.

A patient with acute tuberculous bronchopneumonia was treated by artificial pneumothorax. Thirty-four days after the first introduction of nitrogen gas and following a coughing fit, spontaneous pneumothorax developed. At first partial; within twelve days the spontaneous pneumothorax had become complete, and purulent fluid developed in the chest. The patient became very septic and gravely ill and on the eighteenth day of the spontaneous pneumothorax a rib resection was done under local anesthesia. C. H. Cocke, of Asheville, who communicates this case report, notes that, after surgical operation, the

patient's relief was spectacular and that his fever disappeared within a day or two and has remained normal since. The author discusses the probable cause of spontaneous pneumothorax following artificial pneumothorax, but comes to no conclusion regarding its etiology. Amer. Rev. Tuber.

In a paper from the Department of Medicine of the Jefferson Medical College, (Am. Rev. Tuber.) Funk expressed his belief that late syphilis of the lung occurs clinically more often than is generally taught. Diagnosis is difficult and judgment may have to be suspended until lues has been controlled by treatment, when "apical rales" will clear with the associated bronchitis if signs are due to syphilis. The author reports in detail three cases of what he believes were pulmonary syphilis that have come under his own observation. In arriving at a diagnosis the following points are important: (1) the history; (2) signs of syphilis in other organs; (3) the location of the lesion—syphilis usually involves the hilum areas of the bases, unusually rare locations for primary tuberculosis lesions; (4) the persistent absence of tubercle bacilli when signs of advance pulmonary disease are evident; (5) a positive Wassermann reaction when all tests for tuberculosis are negative; (6) certain roentgenographic features which the author gives in detail; and (7) the response to antispyhilic treatment.

Surgical experience in the world war confirms the safety of ether anaesthesia over that of chloroform. The practice of giving one-fourth grain of morphine and one-hundred fiftieth of a grain of atropine, thirty minutes before giving the anaesthetic is not a new practice but a confirmation of the old and sensible one. The atropine lessens the flow of mucus and stimulates the heart's action and the morphine prolongs sleep after the effect of the anaesthetic passes off. Using a little chloroform by the drop method just preceding etherizing is much more pleasant to the average patient. The choking sensation from the ether is avoided and the time of getting the patient under its influence is shortened.

One of the breaks holding back medical progress is institutionalism. That is, a discovered fact in medicine by a common doctor is not a fact until approved by the high-brows. Institutionalism hinders progress all along the line, whether in the form of an organization or public opinion. It has made a jest of the legal profession. It is a stumbling block in religion, although the World

War did knock "hell" out of the dogmatic curriculum and has in a large measure substituted hope for fear. Our plea is for the medical man individually to live up to what regular medicine professes; to ignore nothing, "prove all things; hold fast to that which is good."

Motion pictures showing the surgical uses of Dichloramine-T will be displayed at the April A. M. A. meeting at New Orleans, by The Abbot Laboratories, of Chicago. All physicians attending this meeting are cordially invited to see these and other interesting pictures of recent medical and surgical procedures.

Mrs. Henry R. Rea of Pittsburgh, Pa., has given \$100,000 to the New York Post Graduate Medical School and Hospital's \$2,000,000 Endowment fund. This gift was announced by Dr. Ludwig Kast, a member of the Endowment Fund Committee and Professor of Medicine in the school, last week. In addition to Mrs. Rea's gift, James C. Brady of New York has given \$50,000 towards the first \$1,000,000 and has pledged \$125,000 to help in raising the \$2,000,000. Vincent Astor gave \$50,000 and has promised an additional \$75,000 after the first \$1,000,000 has been raised.

Co-operation is the essential principle which lies behind all successful industries of modern times. It is a principle which has been adopted by big business and little business, by employers and employees, by skilled laborers and common laborers—in fact, by all but the professions, especially the medical profession.

The medical profession is now fairly well organized and there is a hearty co-operation in whatever goes to improve its efficiency and skill in relieving the afflictions of mankind, and in enlarging its field of usefulness to the sick and the well. But the most perfect machine that can be constructed must depend for its continued operation upon the perfection of its lubricating system and the efficiency and constancy and permanency of its motive power. If the individual units of our organization are to work smoothly and up to the standard of efficiency there must be a readjustment of our lubricating system and a more generous and constant supply of motive power.

No one has offered an explanation of the epidemic of faith healing that seems to have invaded our country. Heralded by tales of wonderful cures the approach of one of

these healers is met by crowds of expectant and hopeful sufferers; his retreat leaves disappointment, disillusionment and skepticism behind. These new faith healing propagandists claim not to oppose medicine and the medical profession, but propose to co-operate with them. This co-operation, however, is very much like the "watchful waiting" we heard so much about a few years ago.

Fostered by the church these propagandists can forestall the criticism to be otherwise expected from the press, and secure the submissive attitude on the part of the medical profession.

Grey Turner (Brit. Surg. Jr.) mentions two cases of acute pancreatitis which presented bluish or dirty greenish discolorations on the abdominal wall. In one case it was situated at the umbilicus, in the other case there were two patches one on each loin. He believes this discoloration is due to the direct action of the pancreatic juice which escapes via the retroperitoneal tissue and passes by the most direct route to the surface.

Spectatoritis—This is not a disease. It is a condition. An expectant condition of the human mind. It is present at every medical society meeting. It is the desire to be an on-looker. A witness to the proceedings. A taking for granted that our bodily presence meets the requirements. It may be better at times to fill the zero or cipher space and push the digit over to the left. There may be a skin absorption of information by the sitting delegates. But the doctor is not doing his duty to himself or his society who does not take an active part in the proceedings. He may excuse himself by saying or possibly thinking that he does not know enough or cannot add anything worth while to the interest of the meeting. He may get cold feet or be afraid that some member may think he is cheeky or may try to suppress him.

There may be some foundation for these thoughts and misgivings of the young doctor. But this is his cross. It is a crucial test of his initiative worth in a medical society and leadership in pushing the work of the society on in getting results.

It is a duty he owes to himself to study the program of the meeting and be able to present a few points worth while or to emphasize a few established old ones and thus advance or confirm established practice and make himself a unit of value.

SOCIETIES**Sumner County Society**

The Sumner County Medical Society met at the Park House in Wellington, Thursday, March 25, at 8 o'clock.

The program—Personal Experiences and Other Lies, by each and every member present, was served with refreshments.

The following officers were elected: G. S. Wilcox, Mulvane, president; J. C. Caldwell, Wellington, vice-president; H. A. Vineent, Wellington, censor; H. G. Shelly, Mulvane, delegate; T. H. Jamieson, Wellington, secretary-treasurer.

A committee on Physician's Remuneration and a committee on "eats" were appointed, both to report at the next meeting.

Jackson County Society

The Jackson County Medical Society has been revived and Dr. William L. Wilmeth, Denison, is the new president and Dr. C. W. Reed of Holton, the secretary. Nine members were enrolled at this meeting.

Shawnee County Medical Society

The regular monthly meeting of the Shawnee County Medical Society was held at Christ Hospital, April 5.

The following clinical cases were presented:

Actinomyosis, Dr. M. B. Miller.

Marasmus, Dr. C. F. Menninger.

Transverse Myelitis (2 cases), Dr. K. A. Menninger.

Empyema, Dr. W. E. MeVey.

Acute Appendicitis, with discussion of the Post-operative Treatment of Abdominal cases, Dr. W. F. Bowen.

Delegates were elected to the State meeting at Hutchinson. Nine new members were elected. After the meeting a lunch was served.

The next regular meeting will be held, Monday evening, May 3, at St. Francis Hospital. Out of town medical men are invited.

E. G. BROWN, Secretary.

Clay County Society

I am glad to report that every doctor in Clay county except one, is a member of the county and state societies and entitled to all the rights, privileges and honors of this organization.

The following report should have been submitted long before this but it was overlooked. Kindly excuse for this time. On

March 18th, 1920, the Clay County Medical Society met in the office of Dr. X. Olsen, Clay Center. Meeting called to order by the president, Dr. W. R. Morton. Other doctors present: Dr. R. J. Morton, Dr. E. C. Morgan, Dr. B. F. Morgan, Dr. W. L. Speer, Dr. E. N. Martin, Dr. G. W. Bale, Dr. Robt. Algie, Dr. X. Olsen, and Dr. James A. Miller. Practically every doctor in the county would have been present except for the exceedingly bad dust storm.

Mr. O. Swaller, president of the Clay County Red Cross Society, and Miss Celia Hanson, representing the state Red Cross for Clay county, were present and explained the work which is sought to be done through the Red Cross in the county. The work was unanimously approved by the doctors present and assistance pledged for further practical application and development of the Red Cross plans.

Dr. Robert Algie was elected to full fellowship.

Dr. W. W. Duke, of Kansas City, delivered a very interesting and instructive lecture on, "The Stomach," using lantern slides and confining his lecture chiefly to ulcer and cancer of that organ and of the pylorus. The society extended him a very hearty vote of thanks and made him an honorary member.

The new officers for 1920 are: Dr. E. C. Morgan, president; Dr. E. N. Martin, vice-president; Dr. X. Olsen, treasurer and Dr. James A. Miller, secretary. Dr. X. Olsen was elected to succeed himself on the Board of Censors for a term of three years. Dr. W. R. Morton, the retiring president, was elected delegate to the state convention.

A number of questions of private but vital interest to the Clay County Medical Society were discussed.

Our next meeting is to be held the latter part of April.

JAMES A. MILLER,
Sec. Clay County Med. Soc.

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COMMENT**BY THE PRODIGAL**

Behold how good and how pleasant a thing it is for brethren to dwell together in amity and work together in unity.

The physicians in the medical department of the University of Kansas are striking the responsive professional chord in the Kansas Doctor.

There are four clinical papers in the

March number of the K. M. S. Journal, from as many medical instructors in the college. These papers are a credit to the profession at large—Self Starters. In saying this no shadowed reflection is cast upon the other papers in that number of the Journal. But it is to emphasize the good, practical, professional and business sense shown by these professors in patronizing and pushing along home industries. Also in meeting out the brew that has been received and manufactured by the university which is due the profession, and in fulfilling the object or purpose for which the University is—and stands for—the dissemination of what is known.

These clinical papers are hot stuff, right off the griddle of science and the sweet smelling savor of the emanation cannot help but penetrate the olfactory in electrostatic units and permeate the whole entity—the doctor. Coming down to the earth again, say, these clinical reports show that the University doctors are on the job and are equal to the emergency and can fill any requisition made upon them by the profession.

This clinical working feature in the home Journal cannot help but arouse public professional pride in Kansas and be far reaching in medical educational results.

This university medical, educational home center answers the practitioners question, "Where shall I go for post-graduate work?" Some of the advantages are that it will lessen his expense; it will familiarize him with local diseases and conditions which he has to treat at home; he will be able to meet his teachers on a level and rub elbows with them; and get in living touch and a warm hearted cordiality will spring up between the post doctor and his teacher. There will be none of that cold, distant, exclusive, austere, kingly air of "Now God I'm Herc," which seals the lips and freezes the think works of the student.

The time now is when not the doctor only, but the laity knows that a physician who does not keep posted by studying in a medical center, a month at least, every second year soon becomes a has been and will lose out if he has live competition.

Again, medicine is a semi-quasi science. "Science is progressive and never ceases to unfold or to enlarge its boundaries." But because of medicines semi-ness, many of its tenets have to be reversed. This reversing and abondonment of tenets in medicine has taken place several times in the memory of men yet living. Hence the vital importance of the practitioner keeping in touch with the

last and best thought of the age and the mechanism to help demonstrate the fact. It is claimed, as yet, that 40 per cent of diagnoses are wrong. This percentage can be lessened by mechanics. However the doctor who depends upon mechanical diagnoses alone will get left.

Fortunately in the clinical papers published in this Journal there is a happy combination, an admixture of the mechanical, didactic, and bedside teaching. A blending of scholastic, mechanical, manual and clinical therapeutic instruction.

Lack of Journal space and cold type can give but a foreglint of the benefit and help to the post doctor as compared to the living voice, the personal contact and the atmospheric surroundings of a live, up to date clinic with all the "fixins." Try it Brother.

Again: "As iron sharpeneth iron, so doth the countenance of a man's friend."

There is a mutual benefit to be gained by this good fellowship home instruction. The post doctor will not be afraid to call the attention of his home teachers to little nuggets of disappointment he has found in his experience in applying some of the tenets of the profession. These nuggets of the post's disappointment can be dropped in the university assayers cupel and the cause of disappointment shown up; the gold and the dross.

The big thing in a university and that upon which a doctor wins, is the grit and ability to find out and to overcome the cause of failure and disappointment.

Enduring and suffering disappointment and failure never got an institution or a doctor any other place than the dump pile. It is overcoming that enables them to wear the radium crown.

Another one of the knotty problems the doctor needs help in settling and which the university physician is prepared to solve is, "What part of the curriculum should I take in, to get the most benefit for my time, labor and money. Not only to get what I want, but what I ought to get out of the course." The doctor's time is limited and the field so crowded that he is apt to lose himself and come away with a smattering of everything and no clean cut, practical idea of any one thing; unless care is given in preparing the work for each specialty or practice. It requires tact and ability to direct the post doctor, or at least help him to find himself in his new environment so that he may get his money's worth and be pleased with the school work when he goes home and thinks things over and sees what

he got, by home results. And here again the tact and good judgment of the teacher and the success of the post school is measured and its worth established in the profession, not by a presentation and long disquisitions on the intricacies of diseases and pathological conditions which seldom occur, as the presentation, diagnosing and the treatment of the common ills to which flesh is heir. It is exactly the same principle of taking care of the cents and the dollars will take care of themselves in finance.

Some attention (a little) should be given to unusual pathological conditions and freak diseases, but of more vital importance to the graduate practitioner is to know what to feed a patient; the cause and how to abort a cold; the flu; a wart; carbuncle; furuncle; skin diseases; constipation; bellyache; borborygmus; piles; stiff joints in the old rheumatics; bad breath; displacement of the cervical vertebrae and the whole category of common ailments, rather than an unexplainable unusual, hidden and mysterious freak or possibly rare pathological specimen which so far scientists have failed to classify or name. The post doctor must be given what he can assimilate and appropriate and use in his daily work and to meet the needs of his clientele.

The clinical post graduate teacher must not put the fodder too high in the rack nor overlook the little nubbins because of the big shuck.

Dietetics.

Dietetics is defined as the branch of therapeutics treating of food and drink in relation to health and disease. As between a thorough knowledge of drugs in the treatment of disease and a thorough knowledge of dietetics the latter appears to be the safer course to pursue and better results are obtained. One of the most notable cases reported in recent years between that of the drug therapist and that of the purely dietitian is that of the crew of the Kronprince Wilhelm, as related in the Medical Review of Reviews, New York, for November and December.

"When this German commerce raider came into Newport News on the night of April 15th, 1915, to be interned, 110 of her crew were completely prostrated and some of them on the verge of death with a mysterious malady, while most of the remaining 390 were suffering in various degrees from physical disability. In the milder cases the victims complained of weakness, shortness of breath, palpitation, pain in the nerves in

various parts of the body, tenderness of the nerves under pressure, and swelling of the limbs below the knees. The more severely afflicted had, in addition, dilated pupils, swollen gums, cardiac dilatation, anemia, atrophy of muscles and paralysis. Slight scratches bled uncontrollably and refused to heal. For 255 days the ship roamed the Atlantic, sinking numbers of merchant ships of every kind and size, while by virtue of her great speed, she frustrated all efforts to capture or sink her. She might have continued her career of destruction to the end of the war, had not a silent enemy from an unexpected quarter sown the seeds of death among her crew and sent her slinking away in the darkness to give up the struggle. In all these eight months, she did not enter any port, but kept herself well supplied with coal and provisions taken from her victims before she sent them to the bottom. Most of these ships were crammed with food stuffs of every kind for European countries. So abundant was the booty that her crew of 500 had an allowance of three pounds of fresh beef or mutton per man per day, besides an abundance of ham, bacon, butter, condensed milk, canned vegetables and fruits and mashed potatoes, white bread, sweet biscuits, lard, coffee and sugar.

The crew were well fed, if being well fed means that they had all they could eat of the kind of food eaten regularly by a majority of the people of this country. They had plenty of fresh air and exercise." Now comes the meat in the cocoanut.

"At Newport News the ship was visited by many health officers and experts, who made various diagnoses of the strange disease. The mystery was not solved, however, by a medical man, but by a dietetic expert, Mr. Alfred W. McCann, of New York. He pronounced the malady to be an extreme acidosis, induced by a diet of acid forming foods, lacking the vitamines and alkaline bases that are essential to health.

He persuaded the ship's surgeon, Dr. Perenon, to put the invalids on a diet planned in accordance with this hypothesis. Immediately improvement followed, and it is said that all the men recovered.

Fresh fruits and fresh vegetables were lacking in the diet of the crew. Most of the tissues of the body suffer when the calcium salts are dissolved out by a condition of acidosis.

The vitamines, bases, and colloids necessary to preserve health have been largely processed out of them."

DEATHS.

John T. Blank, Elk City, Kansas, was instantly killed at Independence, Kansas, when his automobile was struck by a Santa Fe train. He was graduated from the Eclectic Medical College of Cincinnati in 1890. He had practiced medicine in Elk county for twenty years.

Wade Doster, Capt., M. C. U. S. A., aged 39, Coldwater, Kansas, was shot and killed at Columbus, N. M. He graduated from Jefferson Medical College in 1907. Capt. Doster was on duty at Camp Furlong, N. M.

Jeptha Dillon, Fillmore, Calif., aged 75, died February 9. Dr. Dillon graduated from the Medical College of Ohio in 1873. He formerly practiced medicine in Eureka, Kansas, and was at one time president of the Greenwood County Society.

Daniel Russell Phillips, Leavenworth, aged 56, died in Topeka March 5, from myocarditis. He graduated from the College of Physicians and Surgeons of the city of New York in 1887. He was a member of the Leavenworth County Society.

R**STORMONT MEDICAL LIBRARY**

(Kansas State Library.)

Books added to the library from January 1, 1920, to March 31, 1920:

Aleohol, Its Action on the Human Organism.
Besredka. Anaphylaxis and Anti-Anaphylaxis.
Brady. Personal Health.
Breckenridge & Abbot. The Delinquent Child and the Home.
Brown. Sex Worship and Symbolism of Primitive Races.
Cameron. The Nervous Child.
Church and Peterson. Mental and Nervous Diseases. 9th ed. 1919.
Da Costa. Physical Diagnosis. 4th ed. 1919.
Da Costa. Modern Surgery. 8th ed.
Draper. Acute Poliomyelitis.
Fischer. Oedema and Nephritis.
Galbraith. The Family and the New Democracy.
Galbraith. Personal Hygiene and Physical Training for Women.

Giles. The Nose, Throat and Ear.
Giles. Sterility in Women.
Henderson. Preventing Agencies and Methods.
Henderson. Prison Reform.
Holt. Care and Feeding of Children.
Hull. Surgery in War.
Johnson. The Alms House.
Kelley. Surgical Diseases of Children.
Kellogg. The Itinerary of a Breakfast.
Kerley. The Practice of Pediatrics.
Kober. Diseases of Occupation and Vocational Hygiene.
Koplik. Diseases of Infancy and Childhood.
Leavitt. The Operations of Obstetrics.
Lovett. Lateral Curvature of the Spine and Round Shoulders; Their Cause, Prevention and Cure by Gymnastic Exercise.

- Lueka. Eros; Sex Relations Through the Ages.
MacLeod. Physiology and Biochemistry.
MacLeod. Burns and Their Treatment.
Medical Clinics of North America. Vol. 3, Nos. 3 and 4. (Nov. 1919 and Jan. 1920.)
Meisel. The Sexual Crisis.
Mosher. Health and the Woman Movement.
Nesbit. Household Management.
Norris & Landis. Diseases of the Chest. 1920 edition.
Nutt. Diseases and Deformities of the Foot.
Ostwald. Handbook of Colloidal Chemistry.
Peters. Chemistry for Nurses.
Reeves. Care and Education of Crippled Children in the United States.
Richmond. Social Diagnosis.
Royster. Handbook of Infant Feeding.
Ryan. First Aid Dentistry.
Sanders. Modern Methods in Nursing. 2nd ed. 1919.
Sanger. History of Prostitution.
Santee. Anatomy of the Brain and Spinal Cord.
Simon. Human Infection Carriers.
Singerland. Child Placing in Families.
Singerland. Child Welfare Work in California.
Starr. The Hygiene of the Nursery.
Stiles. Human Physiology.
Stiles. Nervous System.
Still. Common Disorders and Diseases of Childhood.
Stokes. The Third Great Plague—Syphilis.
Waters. Visiting Nursing in the United States.
White. Principles and Practice of Veterinary Medicine.
Wiley. Beverages and Their Adulteration. 2nd ed.
Winslow. Prevention of Disease.
Worth. Squint; Its Causes, Pathology and Treatment.

Current Medical Magazines Received.

American Journal of Medical Sciences.
American Journal of Public Health.
American Review of Tuberculosis.
Annals of Surgery.
Archives of Pediatrics.
Index Medicus.
Journal of the American Medical Society.
Journal of Delinquency.
Journal of Experimental Medicine.
Journal of the Kansas Medical Society.
Lancet.
Medical Council.
Military Surgeon.
Modern Medicine.
Physical Culture Magazine.
Progressive Medicine.
Surgery, Gynecology and Obstetrics.

R
The Nurse Question

J. D. Robertson, Health Commissioner, Chicago (Journal, A. M. A., Feb. 14, 1920), gives an account of his school for home and public nursing, conducted by his department in Chicago. Every physician knows, he says, the difficulty of securing competent nursing care for people in moderate circumstances. The school mentioned was established in August, 1919, anticipating the outbreak of influenza and grip of 1920 by a number of days. The available supply of regular nurses was early exhausted, and for a period of days the calls on the health

department were at the rate of fifty per hour. There is no question about the value of the registered nurse, but the trouble is that only those in very comfortable circumstances can afford to employ them; hence the foundation of the school, with the object of both teaching and helping. The course given covers two months, the pupils spending in class, two hours a day for three days a week. Seven hundred and ninety were graduated in the first class, and 1,363 in the second. Then the coal strike occurred and the size of the class had to be limited to 1,000, the present number. A table of data concerning the first two classes is given, showing a large proportion of American born women and of married women. At no time since the graduation of the first class have they been able to meet the call for the services of these women, but no dissatisfaction with their work has been expressed to Robertson. There was opposition at the beginning, but this has mostly subsided, and it has never been sufficient to affect the work. They make no claim that their training is equal to that of registered nurses, but they do claim that their graduates can satisfactorily fill the need for the general run of cases where all that is called for is the conscientious following of the doctor's direction. In a critical surgical case, he would prefer one with special training, but for ordinary cases they are quite as capable and often more desirable because they are willing to do housekeeping as well as nursing, and in its final analysis, nursing is simply housekeeping for the sick. At a meeting of the staff of the department of health the curriculum of the standard nursing course with a view to determining what was absolutely essential was discussed. The curriculum adopted, both as lectures and demonstrations, is given, special emphasis being laid on the taking of temperature, pulse and respiration. Many of the students learn quickly, others are slower, and the hardest two weeks, as far as the instructors are concerned, are the two weeks drilling on this course. Throughout the course, two main propositions are insisted on—absolute adherence to the physician's orders and strict cleanliness. To give some idea as to the latter, it was arranged that each woman should be given a chance to see at least one surgical operation in a hospital amphitheater. In giving medicines, the physician's orders were especially emphasized, and also instructions against any assumption of the physician's duties by the nurse. Most of the women trained have no intention of

nursing outside their own families, that is ordinarily. While the output, so far, looks insignificant as compared to the needs of a population of two and a half million, a start has been made and this is the most important. There is no intention to run in opposition to the skilled trained nurse—the idea is to train a body of housekeepers for the sick. Robertson says, they are training soldiers to serve under the leadership of physicians in the fight against disease—they are not training subofficers. He would be glad to see a similar movement in every health department in the land, and would give his aid to the extent of his resources to every one who desires it.

R

Gumma of the Breast

Loyd Thompson, Hot Springs, Ark., (*Journal A. M. A.*, March 20, 1920), cites the case of a woman complaining of "nervousness" at times, pains in the arms and neck, frequent headache and a lump in the breast. An older sister was operated on for cancer at 36. The mother was living and well at 65. Her personal history had no bearing on the case, except that she had had two miscarriages. The husband had suffered from syphilis for three years before marriage, but was assured by his family physician that he was cured. The patient never showed any outward manifestations of the disease, had enjoyed quite good health all her married life and her blood Wassermann reaction was negative. The lump in the breast was noticed in November, at which time it was about the size of a walnut. It gradually became larger, and during the summer of 1919 she was examined by a surgeon and had a Wassermann test made. This was reported as weakly positive. A short time before coming to Thompson she was examined by another physician, at which time her blood Wassermann reaction was strongly positive. When Thompson first saw her, the blood Wassermann test by the classical method, with cholesterolized antigen, was + + + ; in the ice-box and by the Thompson modification, + + + + . A diagnosis of gumma of the breast was made and the patient placed on treatment. Mercuric benzoate was administered intramuscularly in doses of 0.02 gm. daily. Potassium iodide was given by mouth, 10 drops three times a day increasing 5 drops daily until 100 drops three times a day were reached. Neo-arsphenamin in 0.6 gm. doses was administered at weekly intervals for six weeks. In view of the history of syphilis in the husband, the two miscarriages, the positive Wassermann test and

the result of the therapy, there is no doubt in Thompson's mind that this case was one of gumma of the breast.

B

General Prognosis of Syphilis

According to Sigmund Pollitzer, New York (Journal A. M. A., March 20, 1920), there is no factor in the prognosis of syphilis that is comparable in importance with early and energetic treatment. The syphilis that has been generalized in the system, that has infected every organ and tissue, that, in the course of years, has induced sclerotic changes in important structures, presents an entirely different prospect of cure from the disease in its incipience. The treatment of syphilis by the vigorous exhibition of arsphenamin in its primary stage, while the disease is still largely a local infection and before the organisms have acted long enough on the tissues even to provoke the development of a positive Wassermann reaction, results in the immediate cure of the disease in practically every case. It is in its primary stage that the prognosis of a properly treated case of syphilis is at its very best. The prognosis of syphilis has been immeasurably improved by the discovery of the spirochete. The second great achievement of recent years is the application of the Bordet-Gengou method of complement fixation to syphilis—the Wassermann test. The third achievement is the employment of the organic arsenic compounds to which the name arsphenamin has been officially assigned. The recent additions to our knowledge have made it possible to attack the disease by prophylaxis at the moment of infection; to make an infallible diagnosis before the system is swarming with spirochetes; to recognize the necessity for further treatment even in the absence of symptoms; to detect the disease in the central nervous system before clinical symptoms are manifest, and finally, in arsphenamin, have given us a remedy incomparably superior to mercury in speed of action as well as in efficacy. It is inconceivable that the next generation will not reap the benefit of the improved prognosis of syphilis.

B

A Ten Years' Retrospect.

Apropos of the increasing complexity of all the departments of society, one might ask what object is there in a special organization of obstetricians having to do with only one branch of medicine in the community such as ours.

The recent publication of the Bulletin of the Division Child Welfare of the Bureau of Labor—a very appropriate branch of the Government for such statistics—gives a standing answer to the question, "Is it worth while," as shown by the following quotation:

"It is affirmed that in five counties selected at random from various sections of the United States that maternal mortality has in 10 years gone up from 17 to the thousand to 21 to the thousand and that out of 167 births of living children in a similar survey, it was found that 95 babies died within the first four weeks of life."

If the United States is to survive as a nation, we must conserve our population by not only keeping up the birth rate but by saving the babies which are brought into the world alive. To this statement, we all agree.

In a paper before this society three years ago, the writer called attention to the various agencies at work which are reducing the population: First, decrease of marriage among native born persons; second, decrease of the size of families among the same element of people. In Massachusetts, the records show that in 40 years the average size of the family has shrunk from 7.5 children to less than 3. Third, the increase of divorce which according to statistics is alarming. Here in Missouri the courts grant divorces to applicants in ratio of 1 divorce to 11 marriages. Scores of separations are decreed in the recess of routine trials adjourned for the lunch hour according to the newspapers. While all these matters are sociological and not in our distinct province, they increase the menace which we are facing and as citizens we are bound to consider their influence on our country's future problem.

Now, therefore, if the nation is thus approaching the condition of France where the government a few years ago offered prizes for families of over three children why shall we not by organization attempt to stem the tide which must if allowed to sweep on to the ultimate conclusion, bring us to the decline and fall of America.

Has the Obstetrical Section of Jackson County Medical Society a mission? I answer it has.

Witness in the ten years of our existence, we have strengthened the influence of our members by such a fraternity that Surgeons and Internists ask: "What is the secret of you obstetricians being in such harmony in Kansas City?"

First: It is close acquaintance which brings friendship and loyalty so that in several of our hospitals, it is a routine practice in the absence of an Attending, and in an emergency, one of the other men take the care of his case until he arrives and never a question of exceeding the limit of propriety nor professional decorum. This mutual understanding comes from our knowing each other.

Second: Obstetric practice is becoming standardized by our members. A schedule of minimum requirements was issued several years ago by a committee of the Section and accepted by the hospital superintendents as a guide for conduct of cases in the maternity departments of the various hospitals.

Third: We have taught nurses and internes the value of external examination of patients so that the McDonald and Ashfield dimensions, foetal heart, blood pressure, rectal touch to determine height of presenting part and degree of dilatation are as familiar to them as the average physician and they are thus informed for the benefit of the attending man and their own education is also advanced in the diagnosis of these conditions.

Fourth: The standardization of the treatment of eclampsia and pre-eclamptic conditions in Kansas City owes much to our members who have classified their results and published them in the Bulletin, the State Journal, and other publications.

Fifth: The wearing of rubber gloves and duck suits in the lying-in room has been made not only free from the jest of being conspicuous but now it is demanded by patients themselves when these means of protection are overlooked even in cases treated at home.

Sixth: The opinion of an obstetrician as to the need of cesarian section is now insisted upon by a number of our best surgeons including our orator of the evening, Dr. Howard Hill, before he will begin an operation of this class. This reorganization of obstetric diagnosis is not only in itself gratifying but often it results in valuable assistance to the surgical treatment of borderline cases.

Seventh: Prenatal care is becoming more and more the usual routine and our prospective mothers are given advice and measurements recorded for the use in their future labor which a few years ago were not considered necessary but which now are universally expected.

Eighth: DeLee's Year Book has for three years recognized the contributions of our members to obstetrical literature by publishing each year from three to six abstracts of the articles we have written.

Ninth: Pernicious vomiting, the bête noir of the management of pregnancy has been given a great deal of attention by our men and it is hoped these researches will be grouped by another year and tabulated for publication.

The ten years of the Obstetric Section certainly have made for history in our branch of medicine and having attempted thus briefly to touch upon a few of the accomplishments achieved, it remains only to congratulate our members on the results and urge that we ever press on toward the goal with the resolve of better understanding, better diagnosis, better work and still better babies for the coming generation.

(Abstract of address Tenth Annual dinner of the Obstetric Section, Jackson County Medical Society, March 25, 1920, by Dr. Geo. C. Mosher.)

By Arterial Hypertension

The great importance of arterial hypertension and the confusion of some of the questions concerning it form the subject of an article by F. H. Allen, New York (Journal A. M. A., March 6, 1920). He gives a review of the theories regarding the causes of this condition and says that in the American literature the necessity of salt and fluid restriction in hypertension is mentioned only casually and incompletely, if at all. The protein intoxication theory is undoubtedly the dominant one; hence, the usual treatment of low protein diet, elimination of supposed toxins of the artificial reduction of pressure by drugs, bleeding, etc., prevails. Mental and bodily rest are advised to an extent that largely limits usefulness in life and many conservative practitioners limit themselves to making the patients as comfortable as possible and resigned to the results. The reasons for the confusion existing are various. The German cases were not well chosen, and on the other hand whether protein has the influence believed or not, it is impossible to accept Ambard's views and those of others, who consider fluid restriction unnecessary, and the strict exclusion of salt required in severe cases not so generally needed; hence the high percentage of failures in treatment. But if any practitioner will conform his treatment to the one reasonable and definite condition—the necessity of the organism to force a filtrate of water and dissolved substances through a damaged and partially blocked

filter—he can readily see for himself the compensatory elements in hypertension. In some hypertension cases, the mere reduction of the overload of salt and water brings relief comparable to that from proper dieting in diabetes. New information is afforded by fuller laboratory study and the special blood analysis. The experience obtained by the author, in co-operation with Drs. Mitchell and Sherrill, in the treatment of hypertension is reported. In general, the patients were not kept in bed or confined to the house, the treatment being entirely diet. The results are given in tabulated form and discussed at some length. The necessity of the limitation of salt in the diet is pointed out by the experimental studies, while the impairment of the nitrogen economy calls for a corresponding restriction of protein and influences the prognosis, though the hypertension is affected only through the salt and water functions. His studies are as yet incomplete and the present report is regarded as preliminary only. The limitations in the treatment based on these principles, as deduced from the results are stated fully, and the possibilities of future investigation pointed out. The ophthalmic disorders are interesting and more cases with such are needed in the study, and the clinical facts collected warrant the discarding of ungrounded theories; the widespread abuse of drugs, particularly of nitrites and iodids, stopped, and the possibility of modern laboratory studies being more utilized. The treatment is largely palliative, and blood analyses are important for controlling the condition. The benefit of chlorid restriction for hypertension, though limited, is great in making the patient more comfortable, and possibly in stopping the progressiveness of the disease.

B

Agreement in Results of the Wassermann Reaction

The blood serums of 3,000 patients were subjected to the Wassermann tests by two independent laboratories. An analysis of the results made by H. C. Solomon, Boston (Journal A. M. A., March 20, 1920), showed that there was a complete uniformity in the findings of the two laboratories in 93.44 per cent. The 6.56 per cent variation included cases reported as doubtful. Considering only the variation of cases reported positive by one laboratory and negative by the other the percentage variation was 4. This was 1.4 per cent, positive in one laboratory and 2.6 per cent positive by the other laboratory. Some of the cases

reported positive by one laboratory and negative by the other were known to be syphilitic, so that the negative reaction was the incorrect one. Considering then, the cases that either laboratory may have reported as positive in non-syphilitic cases, the percentage was 3.16. This is probably a higher percentage for false positives than actually occurred, as some of these cases were presumably syphilitic. This percentage variation is based on only one test. Repetitions resulted in a uniformity of findings in the majority of cases. This is considered a good testimonial for the accuracy of the tests as performed in these two laboratories.

R

The Tonsil and Infection.

Certain studies of the tonsil, in relation to infectious processes are the subject of a paper by D. J. Davis, Chicago, (Journal A. M. A., Jan. 31, 1920). An interesting point to start with is distribution of lymphoid tissue which is specially accumulated in the palatine tonsils and in the ileocecal region. These accumulations seem to be a protective mechanism against pathogenic organisms, more against some than others, and it may break down entirely in some cases. Another point noticed as of importance is the surface area of the tonsils, which Davis has attempted to measure, and finds it roughly averages about 25 square cm. Another feature of significance is the distribution of plasma cells, which, generally speaking, indicate chronic inflammation or irritation and therefore must be regarded as pathologic. Their time of appearance, distribution, tendencies, etc., were studied by Davis. He disputes the statement that the bacterial flora is abundant and varied, as he finds that not every germ that enters the tonsils will develop there. He sums up his conclusions from the study as follows: "In order to understand clearly the genesis of certain diseases, it is necessary to study intensively a suspected focus of infection, like the tonsil, in both normal and infected persons. Lymphoid structures attain two maxima of distribution; one in the throat and another in the region of the ileocecal valve and appendix; these maxima correspond in general to the normal distribution of bacteria in the alimentary canal. At these points also the greatest number of pathogenic micro-organisms attack the body. Plasma cells appear shortly after birth (therefore after infection) under the mucosa, and their presence probably indicates chronic absorption of infectious and other material. Certain

organisms injected into the crypts of the tonsils disappear in a few days. The flora normally found in the tonsils is a restricted one. Actinomyces-like granules composed of fusiform bacilli, streptococci and spirochetes growing together appear as more or less normal inhabitants of the crypts. Here may be an important source of *B. fusiform* in certain infections about the mouth caused by this organism. In the tonsil erypts, *Streptococcus hemolyticus* is almost constantly found. This focus is one source of these organisms in the throat and adjacent structures. This fact must be considered in making throat cultures and in a study of the problem of hemolytic streptococcus carriers."

R

Dislocation of Patella.

An unusual form of patella dislocation is reported by J. W. Perkins, Kansas City, Mo., (Journal, A. M. A., Feb. 7, 1920). The patient was a laborer, and the accident occurred when he attempted to jump over a truck. The patella projected directly toward the front of the joint. In twelve hours, considerable effusion in the joint concealed the bone. The roentgen ray disclosed the patella dislocated so as to put the upper edge down between the condyles while the lower projected forward. Its longer axis was at right angles to its normal. The upper part had evidently been torn away from its attachment to the quadriceps tendon, and the leg was held in a rigid position, slightly flexed, further flexion attempts being very painful. Under anesthesia, with muscles relaxed, the leg was flexed on the thigh and the patella returned apparently to its normal position. With leg extended the dislocation reappeared. "It was evident that in flexing the leg the patella was forced farther down between the condyles and turned completely over so that the anterior surface was posterior, and the posterior surface anterior. The upper end could not be dislodged from its position by any manipulation of the blood distended joint. After two or three attempts reduction by manipulation was abandoned. A second roentgenogram was then taken, which revealed the same position as before. The patella remained with its upper end pressed down between the condyles and the posterior surface facing downward." In the operation the knee joint was opened by a longitudinal incision outside the patella, and about 8 ounces of blood removed. The quadriceps tendon was found torn from the upper part of the patella and the latter was found endwise between the condyles with the upper

end extended backward. It was dislodged by relaxing the quadriceps muscle and hooking the finger under so as to drag it upward to its normal position where it remained. No attempt was made to repair the torn tendon. The wound was closed, and the patient made an uneventful recovery.

R

Intestinal Tube

Jaeob Buekstein, Fox Hills, Staten Island, N. Y. (Journal A. M. A., March 6, 1920), furnishes another article on the use of the intestinal tube, based on the study of a series of roentgenograms, and more especially for demonstrating the principle of the detachable bulb when used for feeding. The advantages are—the clear demonstration of the intestine in the roentgenogram and its shifting motion, throwing light on the mechanics of propulsion and the therapeutic value of exercise in constipation. Secretions from the different portions of the intestine below the duodenum can be obtained for the purpose of biochemical parasitie and bacteriologic examination. The detachment of the bulb at the desired point is secured by the use of chromicized catgut, No. 4, in attaching it to the tube.

R

Foreign Body In Nose

I. W. Voorhees, New York (Journal A. M. A., March 6, 1920), reports a case of a colored man aged 34, who came to the West Side Dispensary, with a history of yellow discharge from the right nostril for the previous two months. The condition was first assumed to be caused by a necrotic bone sequestrum from the naso-antral wall following a tertiary lesion. When the substance was grasped with the forceps, a solid heavy object was slowly withdrawn which proved to be an iron bolt, which the patient had used for a breech in an improved gun barrel seventeen years before. When loaded and set off this breech plug flew back and was never found. It was 2 1-8 inches long and 1-2 inch wide, and it weighed a little over one ounce. It seems hardly possible that a man could carry in his nose so large a foreign body for seventeen years without being conscious of its presence, but there is no denying the fact that this happened in this case.

R

Encephalitis Lethargica in Pregnancy

Margaret Sehulze, San Francisco, (Journal A. M. A., March 13, 1920), after remarking on the history of sleeping sickness of this type, which seems to have been anticipated 100 years ago in mysterious "nona,"

THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, MAY, 1920

No. 5

Myocardial Diseases and Cholelithiasis

MERVIN T. SUDLER, M. D., ROSEDALE, KANSAS

Read before the Kansas State Medical Society at Ottawa,
Kansas, May, 1919.

We have recently learned much of foetal infection and its far-reaching effects and results. This information probably will continue to grow in scope and accuracy for some time to come. I wish to present to you a subject in some ways allied to this, which was ably presented to the medical profession by Babeock as long ago as 1909. This subject is that of myocardial disease which results from cholelithiasis and which I believe may also result from chronic irritation of the pelvis of the kidney. In order to present the subject definitely, I shall describe first three illustrative cases, which have brought the matter forcibly to my attention.

CASE 1—My first is that of a woman thirty-four years of age, apparently in good health, with a distinct history of cholelithiasis, not only in the gall-bladder itself, but also of the common duct. This person's pulse was rapid, though otherwise perfectly regular and in good condition. At the operation, the patient took ether badly. The gall-bladder was therefore drained; and the gall-stones in the bladder were removed; then, since her condition was considered dangerous by the anesthetist, all procedures were stopped and the common duct was not even inspected. After thirty-six hours of rapid and rather weak pulse, the patient so far improved that she went on to uninterrupted recovery, as far as the operation was concerned. Sixteen days later, she had a

typical attack of biliary colic; so, under the impression that we were dealing with a condition of acidosis, she was given alkalis and a second operation was attempted later under gas oxygen anesthesia. The abdomen was barely opened, when the anesthetist said that her pulse was very poor. The incision was promptly closed and she was returned to her bed, the heart becoming dilated, the pulse more rapid and weaker all the time, and the patient dying forty-eight hours later from acute cardiac dilatation.

CASE II—The second case was in a patient somewhat older but the case was very similar. The patient was thirty-eight years of age; and her heart showed evidences of dilatation and irregularity before the operation. In this case a cholecystectomy was performed. This patient also had rather a stormy time. The condition apparently improved; then the heart dilated, the pulse became rapid, and the patient died suddenly on the fourth day.

In both of these cases, the kidney function was normal.

CASE III—The third case was due apparently to a similar condition brought about by renal calculi, which have seemingly been impacted for some time causing no other symptoms. This patient is sixty-four years of age. The heart is greatly dilated; and as angina has been present, the condition was diagnosed as gall-bladder trouble. However, very careful studies show that the calculi were in the pelvis of the kidney, though the kidney function remains good; and those of us studying the case are convinced that gall-stones are not present.

Interference with renal function explains probably 21 per cent of the cases of high blood pressure; and it would seem, in casting about for an explanation of the cause of the influence on the heart, that there are several things to be considered. Cholemia, focal infection, or an irritating nervous stimulus of some kind—at least one or more of these conditions are present in practically all such cases. If there is an infection in the gall bladder, associated with gall-stones, there is then an opportunity for the introduction of chronic myocarditis, just as there would be from focal infection anywhere else. In the case of a common duct stone with cholemia, we have of course the effects of the various bile salts on the heart. However, in two of the cases named, cholemia was not present; and it would seem that the hypothesis of the irritation of the splanchnic or the pneumo-gastric nerve should be carefully considered. We have here a mechanism which would explain the nervous upset of the circulation and would also serve to explain a few cases where marked irregularity of the pulse and trouble with the heart have followed gall-bladder difficulty and have very greatly improved with its subsidence. Another explanation and the one which seems to me to be the most probable, is based upon the work of Rosenau, showing the degeneration of heart muscle and the damage resulting from the injection of certain strains of streptococci.

It is likely that in most of these cases the heart mechanism is damaged; and what might otherwise be a slight attack, is capable of producing a great deal of trouble in a heart muscle apparently normal but much weakened. In a recent ease, the heart dropped to below fifty beats per minute under the anesthetic.

Fortunately this damage to the heart muscle happens infrequently; still it occurs often enough to make it a very practical point in the treatment of cholelithiasis and allied conditions.

Since the experience which I have mentioned, we have studied our gall bladder cases very thoroughly before operating. We

take the measurement of the heart in order to ascertain whether or not the heart is dilated; make blood pressure examinations; and a very complete physical examination. There are some other surgical conditions which affect the heart concerning which no satisfactory explanation has been reached. Among these, uterine fibroids, hypertrophied prostate and exophthalmic goitre may be mentioned.

In conclusion, I wish to emphasize a point which was made by Babcock in his first article and which has since been mentioned by William Mayo: There is no such thing as harmless cholelithiasis. A disturbance of the digestion, or a distinct damage to the heart and even kidneys, will probably result; and other things being equal, the earlier the operation is performed, the better opportunity there will be for restoring the health of the patient.

*Authority. The U. S. Bureau of Census reports: "During the 23 years ending in 1913 there has been no definite decrease in the death rate from diseases caused by pregnancy and confinement nor can any decrease be shown in the death rate from puerperal septicemia."

B

Child Welfare In Kansas

BY LYDIA ALLEN DeVILBISS, M. D.

Read before the Kansas State Medical Society at Ottawa, Kansas, May, 1919.

The State is interested in four phases of child life:

1. The Baby:

The prenatal care of the expectant mother.

The obstetrical service at the delivery.

The registration of the birth.

Care during infancy and the pre-school period, including principally:

The protection of food and water.

Protection from communicable diseases.

2. The School Child:

The sanitation of the school house and premises.

The teaching of hygiene and health.

Health supervision of the school child, including:

Physical inspection of the school child.

- Home visits by school nurse.
 Medical, dental and mental clinics.
 3. The Child in Industry:
 His hours,
 Wages and
 Sanitary regulations under which he
 is employed.
 Compulsory vocational and continua-
 tion education.

4. The Crippled, Defective and Depen-
 dent Children:
 Hospital care and training for crippled
 children.
 Institutional care and supervision of
 feeble-minded children.
 Children's institutions and child plac-
 ing for dependent children.
 Juvenile courts and training for delin-
 quent children.
 Care of insane, feeble-minded and dis-
 eased parents.

To this classification might be added a fifth under the heading of General Welfare, Social Hygiene, Economics, Housing and so forth, as everything which affects the life of the family is reflected in the children.

The principal departments of the state activities are respectively:

- State Board of Health.
 State Department of Public Instruction.
 State Department of Labor.
 State Board of Administration.

These departments all co-operate with the Division of Child Hygiene and with each other.

The Division of Child Hygiene is charged with the protection of the health and lives of young children. Besides this, in the absence of any specified constitution authority, every problem having to do with children whatever the nature of it, comes to the Division of Child Hygiene. The Director of the Division is truly like

The old woman who lived in a shoe
 Who had so many children she didn't
 know what to do.

Only the principal activities of the Division of Child Hygiene, and of only those which are likely to be of most interest to the medical profession can be presented in a short paper like this.

In the control of the infant mortality rate, the first essential is to count the babies; to know how many are being born; how many are dying, where they are dying and from what cause. To attempt to conduct any department of the State Board of Health without vital statistics would be exactly like trying to run a bank without a competent bookkeeper. The filling out of birth, disease and death reports carefully and conscientiously may seem a matter of small moment to the doctor at the time. But these same birth, disease and death reports show us where to lay the emphasis on the prevention of disease and death.

If a doctor fails to fill out a birth certificate, he is contributing just that much to the high infant mortality rate with which his state is charged. The infant mortality rate must be **based on the number of babies who are reported** not necessarily the same as the number of babies born. The doctor who fails to fill out and file properly a birth certificate is also laying up no end of trouble for the unfortunate baby. Citizenship, among other important affairs of a person's life, depends upon his birth record, and if it has not been recorded for him as it should have been, the individual has a just cause of complaint and a score to settle with the offending obstetrician.

To reduce the baby death rate, it was necessary first to gain the co-operation of the public. The obvious thing, therefore, was to begin with the baby who was already born. Hence most of the efforts of the Division of Child Hygiene have been concentrated on educating the mothers how to take care of their children. The death rates from the commonly preventable causes of deaths of Babies, which may be prevented by better care by the mothers, have been reduced so that they are no longer a principal cause of baby deaths in Kansas. An examination of our baby death records now shows that of

every three babies under one year of age who die:

One is born dead,

One dies within a short time after birth from prenatal causes,

One dies from all other causes combined.

Some of these baby deaths are due directly to a lack of proper obstetrical service, and to the lack of hospital facilities for the difficult cases of labor. It is a striking and a disgraceful thing that while preventive medicine has cut the deaths from typhoid fever in two, reduced diphtheria until it is no longer one of the principal causes of death and reduced practically every other communicable disease, the death rate from diseases of pregnancy and child birth still remain at their high level of 25 years ago.* And child bed fever and diseases of pregnancy and the puerium are still the principal causes of death in women from 15 to 44, with the single exception of tuberculosis.

This record points the necessity to better prenatal care of the mothers, which we are trying to stimulate with the prenatal registry; to the control of syphilis which the Board of Health is trying to do through the Division of Venereal Disease; and to the control of other communicable disease especially liable to cause baby deaths, typhoid fever, small pox and influenza which is handled by the Division of Epidemiology.

After the period of infancy and the pre-school age, our next concern is with the health of the school child. Here again the lack of proper health protection is only just being made apparent. Wide-spread weighing tests of school children indicate that about one-third of all of them are underweight for their height and age, and that about half of this number are seriously underweight, ten per cent or more. The tests made in this State show that Kansas is neither better nor worse than other states.

The first problem of Child Hygiene in the schools is one of adequate and properly balanced nutrition for these school children, as will be evidenced by their regular weighing. Following that will come the problems of

undernourishment that are not dependant upon food but which are the results of some condition interfering with the assimilation of food, enlarged tonsils and adenoids, decayed teeth or focal infections. Then the schools will be ready for the physician, not alone to inspect and report on the children's condition but to establish and conduct clinics for their relief. And as the National Bureau of Education has put a height and weight chart and literature into the hands of every school teacher in America, the day of the school physician and the school clinic is not far distant.

The proper health supervision of the school child necessitates supervision of the sanitation of the school building, and the teaching of health and hygiene in the school room. One of the reasons perhaps why preventive medicine has gotten no farther is because we have been "fighting the fires of disease" in adults whose health habits have been **fixed wrong**. A generation with correct health habits is coming because they are going to get the right sort of health training in the public schools. There may be shortsighted individuals who think that when that day comes we will have little use for doctors. In fact we will need them all the more, for the medical profession will be consulted more frequently by people who know best how to avail themselves of the services the doctors can give. And the intelligent co-operation of the patients is going to make the doctors work less of underpaid drudgery and more of a joy.

If the child's health is properly protected in school he ought to graduate into industry with good health. However, a glance at the prevalence of child labor and at the anemia, underweight, stoop-shouldered, old-before-their-day children who are permitted to labor when they ought to be at play is enough to make those who love children want to spend all their time on this big and perplexing variety of problems. Industrial Hygiene has made enormous strides in the past few months, and with the entrance of large numbers of medical men into industry, the conditions surrounding children are

bound to be speedily improved, even if child labor cannot be abolished altogether.

The crippled, defective and dependent children in Kansas number a great many thousand. Only a few hundred of them are reached by the Division of Child Hygiene. Crippled children are not alone among the poor but the well-to-do who do not realize how badly their children need medical or surgical attention nor perhaps where to take them. These children for whom no provision can be made in their own district are sent to the State Hospital at Rosedale where they are cared for free of charge if their parents are not able to pay for their treatment.

The State Training School at Winfield can care for only a small per cent of the mentally deficient children, and it has been more of a custodial institution than a training school for those who can be self-supporting. The Division of Child Hygiene is not so directly concerned in the care and training of mentally deficient children as it is in the care of feeble-minded men and women who are bringing these children into the world faster than the state can possibly provide for them, and who present the difficult problems of a high birth rate and a correspondingly high death rate of children.

The dependent children in Kansas have heretofore been placed in homes totally unsupervised by any authority. A reading of the reports of some of these so-called children's institutions reminds one of the stories of Dickens. The last Legislature passed a law requiring a license to operate children's homes and maternity homes or hospitals from now on, and the responsibility for these inspections and licenses was placed in the Division of Child Hygiene. Dependent children and children's institutions cannot be separated from the problem of child placing and home finding. The Division of Child Hygiene has been steadily working in the hope that some day in Kansas this whole problem will be attacked in a business like manner and put on the right basis. In caring for institutional children and in placing children in homes, there are

a variety of medical problems. Among other things the health of the children and their freedom from physical and mental defects must be determined, and such defects as may be corrected before the child is given to adopting parents.

There has been a tendency on the part of some people to regard Child Hygiene as a fad. This view has not been held by the medical profession to whom we are indebted for their co-operation and support. Rather than being a fad, the Division of Child Hygiene embraces one of the widest fields in medicine including as it does virtually every factor that influences the life, the health and well-being of humanity.

For every child who is born, the aim of the State must be so to safeguard and protect him from the moment of his inception through the prenatal period; at birth; through infancy; in school and in industry; and to take care of him if he should become dependent, crippled, defective or delinquent, so that at the age of his majority the greater portion of those who began life shall possess a sound mind in a sound body, the first requisites of a good citizen.

By

Nasal Accessory Sinusitis

BY LAVERNE B. SPAKE, M. D., KANSAS CITY, KANS.

Read before the Kansas State Medical Society at Ottawa, Kansas, May, 1919.

The nasal accessory sinuses consist of four groups of cavities, adjacent to the nose, and draining into the nasal cavity, the sphenoidal, frontal and antra of highmore.

The frontal sinuses are two in number, and lie between the two tables of the skull in the frontal bone over the anterior portion of the nasal cavity, extending some distance over each orbit and giving rise to the prominence over the root of the nose and orbit. They develop with advancing age, and communicate with the meatus by the infundibulum.

The ethmoid sinuses are situated in the lateral mass of the ethmoid, and are more properly termed ethmoid cells. They are separated from each other by their bony partitions and are anatomically divided into

three sets, anterior, middle and posterior. While the arrangement may differ from that of Zimkerkanatt and other teachers yet Cayer specimens undoubtedly justify his classifications. The posterior cells are less numerous than the others, and sometimes communicate with the sphenoid, and open into the superior meatus. The anterior cells open by means of a small orifice, the ostia ethmoidalia, into the canal leading from the frontal sinns, or the infundibulum, which in turn opens into the middle meatus at the hiatus semilunaris in its extreme anterior part. In some cases these cells communicate with the frontal sinus, and rarely open into the orbit.

The sphenoidal sinuses are two irregular sinuses about the size of a cranberry, separated from each other by a thin plate of bone. They are situated in the body of the sphenoid and each is partly closed in front, and below by two thin plates known as the sphenoidal turbinated bones. The orifice thus resulting opens into the superior meatus of its respective side at its upper and posterior part. The roof of the sinus is about one-twelfth of an inch thick at its thinnest part, and separates them from the brain. They are absent in children, but develop and increase in size as age advances, and they are rarely symmetrical.

The maxillary sinuses are two in number; are two large pyramidal cavities situated one in the body of each superior maxillary bone. The roof of each antra is formed by the floor of the orbit, its floor by the alveolar process, its external wall by the facial surface of the superior maxillary, it drains into the middle meatus, near the posterior wall of the hiatus semilunaris, by a circular opening, the ostium maxillare accessoriis. The cavities vary much in size, both in races and individuals. They are frequently crossed by thin laminae of bone. In the posterior wall are the canals, transmitting the posterior dental vessels and nerves to the teeth, and on the floor may often be found conical projections caused by the roots of the first and second molars. In the anterior region of the inferior meatus

is the orifice of the lacrimal or nasal duct, leading from the lacrimal sac to the nose.

The nasal cavity is lined with mucous membrane which is slightly different from that which lines the cavities, it has only a single layer of pavement epithelial cells, basement membrane and submucosa, glands are only found at the orifices communicating with the nasal tract.

Infection of the sinuses is practically always secondary to nasal or pharyngeal infection, or from dental origin. First we have a swelling of the mucosa with nasal obstruction, second toxemia with fever, prostration of a lower type, the source of a focal infection; third, may involve the meninges, eyes, etc.

An inflammatory process involving the mucous membrane which consists of a thin layer of cells would necessarily be preceded by or associated with some inflammatory process, which involves the opening of the sinus and thus converting it into a closed cavity, causing retention of the infectious material. Which in turn produces rapid changes in the mucosa and may lead to a total destruction of bone by necrosis, with a permanent fibroid condition of the mucous membrane.

With a bacillus of influenza, pneumococcus, or streptococcus, infection there is a marked tendency for bony necrosis.

When the infectious process involves the ethmoid or sphenoid it is extremely likely to produce bony necrosis due to the honeycomb cells which go to make up these cavities, providing the infection is severe enough to cause necrosis of mucous membrane.

Headaches of nasal origin are of a peculiar type and the nose is generally the last place to look for the cause. Lack of ventilation in the nose and sinuses is accountable for more headache than through lack of drainage, the latter causing pain in an acute suppuration but is less important in chronic conditions. Chronic headaches for which every thing has been tried without affording relief are usually of nasal origin. Severe pain in the frontal region particularly if it is unilateral should make us suspicious of

an acute affection of the frontal or ethmoid sinus. Pain in the jaw especially if increased on pressure, should cause us to look for an acute antrum.

Grunwald gives the following as causes of headache:

1. Increase of mucosa, with irritation of nerve.
2. Direct contact of the swollen mucosa.
3. Negative pressure in the sinuses.
4. Stasis following operation on drainage passages.
5. Ulceration of the mucosa with involvement of nerves.
6. Reabsorption of toxins from without the sinus.
7. Any condition which will cause a acute congestion of the cranial circulation.
8. Disturbance of the blood and lymph circulation at the base of the skull.

Lewis Fisher in a recent article states: "The irritation of the nerves and chiefly the fifth pair of cranial nerves is the chief cause of headache. That the sensory nerve distribution of the head must be affected by the pathological process responsible for headache. The disturbance in question may be found directly along the fibers of the fifth nerves themselves, or on the other hand it may be situated remotely and affect them through the media of the circulation.

Headache may be caused by pressure of the turbinate bones against the nasal mucosa, or a peripheral irritation of the fifth nerve distribution. The dizzy headache involves the vestibular apparatus along with the fifth nerve. Where vomiting is associated with headache, the phrenic nerve and tenth are involved. The toxic condition affecting most frequently that sensory nerve which has the most vulnerable distribution, within the nasal cavity, and then accessory sinuses are large areas of mucous membrane richly supplied with sensory nerves."

Frontal sinus headache usually occurs when the patient arises in the morning, subsiding about eleven or twelve, is band like in character, increasing on exertion and if nose is forcibly cleared may subside and person go about his work.

Vacuum headache of the frontal sinus causes pain and a distinct tenderness at the inner angle of the eye, with pressure of the lower floor of the frontal sinus causing severe pain.

Acute sphenoiditis as a primary cause without the rest of the sinuses being involved is uncommon, while it is possible for the Schneiderian membrane to undergo resolution leaving a focus of infection in the sphenoid, but at that it is more of a subacute condition. The nearest we have to a genuine purulent sphenoidal abscess, is the acute exacerbation of a chronic sinusitis, particularly when stagnation of the secretion occurs.

Catarrhal inflammation, persistent pharyngitis sicca, post nasal discharge, fullness and dryness in the nasopharynx, hawking and rasping in the morning, point to a disease in the postnasal region. In chronic purulent inflammation the mucosa is infected in local areas, some portions being more or less healthy. The characteristics of the types are remittency, exacerbations occur in which the symptoms become pronounced, the discharge profuse, the typical headaches appear, while during the quiescent stage the symptoms abate, but there is always a certain amount of postnasal discharge, dull headache with marked tendency to catch cold. Marked deviated nasal septum is one of the most common causes of sinusitis.

The diagnosis of sinus infection is generally easy, typical headache, nasal discharge, hawking and spitting, more pronounced in the morning. In ethmoiditis the headache is between the eyes, tenderness on pressure over the inner lower portion of the orbit, nasal discharge, drains at the base of the middle turbinate. Sphenoiditis usually causes an occipital headache or radiating pains to the ear, postnasal discharge, drains above the middle turbinate through the olfactory fissure. In frontal sinusitis the headache is usually unilateral, tenderness over the roof of the orbit, nasal discharge, drains at the base of the middle turbinate. Infection of the antrum causes pain and tenderness over the cheek bone, nasal dis-

charge, morning accumulation of tenacious secretion in the nasopharynx is suggestive, will drain in about one hour with head bent forward with the affected side uppermost.

The x-ray is of great value in the diagnosis of sinus affections. The older methods, namely, inspection, transillumination and irrigation, have their place and many times the sinuses have been pronounced as not involved, while with suction both as an aid in diagnosis and also as a curative agent, we have the best single agent in the diagnosis of sinus infections.

The treatment of sinusitis follows the lines of surgical procedure elsewhere in the body, namely, the establishment of proper drainage. First, to establish drainage through the natural sinus opening, which is accomplished by intranasal application of cocaine or adrenalin to the regions of the ostia. In acute cases, rest in bed, with atropine and aspirin internally, combined with free catharsis, will usually relieve the patient. Should fever pain and other symptoms continue showing that the efforts to keep the ostia patent are of no avail, then surgical measures are indicated. These should be of the simplest kind, usually high amputation of the anterior portion of the middle turbinate will suffice, this however is rarely necessary if in addition to shrinking the turbinate one employs negative pressure with suction following each treatment.

The chronic cases of sinusitis are not so readily amenable to treatment, and surgical measures are resorted to more frequently. As removal of polypoid growths, caries of bones, with conservation of the middle turbinate. The emptying of the sinus and treatment by suction and the treatment extending over some period of time. The nasal cavity is first sprayed with some alkaline or warm normal saline solution then the turbinates are brushed with cocaine, waiting three or four minutes, suction is applied, the nasal nozzle inserted in the nose while the other nostril is closed with the finger. The patient is told to say ka or ah or swallow, the object being to close the upper respiratory tract by raising the soft palate. The

suction machine creates a negative pressure in all spaces between the nares anteriorly and the nasopharynx posteriorly. As soon as suction becomes uncomfortable the finger is removed. This is kept up for several minutes, just as long as secretions are brought out. The sinuses are emptied of their contents, the negative pressure induces a hyperemia or a mild congestion, altering the nutritional and favoring reparative processes.

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Deaths

J. A. Hazel, Freeport, Kan., aged 65, died at his home recently of arteriosclerosis. He began the practice of medicine at Milan in 1882 and removed to Freeport in 1895 and has practiced continuously until a few weeks prior to his death. He was a member of the Harper County Society.

Alexander D. Farnsworth, Arkansas City, Kansas, aged 46, was instantly killed, January 31, by the overturning of his automobile. He graduated from the University Medical College of Kansas City, Mo., 1898.



Other Bacteria in Tuberculous Human Lungs.

John N. Hayes of Pittsburg reports the bacteriological findings from the study of the lungs of 52 tuberculous patients who died and were autopsied at U. S. A. General Hospital 19, Oteen, N. C. A number of concomitant micro-organisms, streptococcus haemolyticus and viridans, staphylococcus albus and aureus, pneumococcus, micrococcus catarrhalis, Pfeiffer bacillus, etc. were encountered. He also examined many throats and sputa during life. He concludes that streptococcus haemolyticus was found in a large percentage of the throats and washed sputa. It was also found at autopsy in the caseous areas and cavities of the same patients' lungs. The author thinks it a probable factor in cavity formation. (American Review of Tuberculosis, April 1920.)

BELL MEMORIAL HOSPITAL CLINICS**Out-Patient Clinic of Dr. Logan Clendening**

AN EXERCISE IN DIAGNOSTIC EXAMINATION-FORMULAE

In considering the cases which we have previously studied together in this clinic, you may have noticed that we have pursued in all cases a definite method. After the history is read, I have asked you to suggest all the methods of examination which you would consider necessary to arrive at a diagnosis, a prognosis and a method of treatment in the case. In doing so we have been able to tabulate certain examination-formulae which apply pretty generally to many common symptom-groups. For instance in the case of the woman who complained of cough at our last session we decided that we needed the following examinations to arrive at a conclusion as to its cause:

1. Temperature (at four hour intervals, daily for a week).
2. Examination of the nose and throat.
3. Physical examination of the chest.
4. X-ray of the chest.
5. Sputum examination.
6. Tuberculin test.
7. Wassermann.

In the case of the patient last week, who complained of pain after meals, in the upper abdomen, we made out this formulae:

1. Physical examination of abdomen, reflexes, teeth and tonsils.
2. Gastric contents.
3. Examine stool for blood.
4. X-ray of gastro-intestinal tract.
5. Differential leucocyte count.

Now we do not mean to say at all that these formulae should replace a thorough routine examination. That should of course be done in every case. But when we say routine examination we must remember that our means of examination are very numerous nowadays; no one would contend that a Cammidge reaction, for instance, should be done in every case. We must know what methods in any given patient are calculated to yield the greatest information about

him, and exactly why. And in thinking of them we are also sharpening our conception of disease processes, and are learning to cut through to the heart of a clinical problem.

We will therefore pursue the same procedure this morning in the present case. As I read the history, you must think of the things you wish to know about.

This patient is fifty-six years of age. He looks all of his years. He is a Pullman porter. His family history is of no importance, nor is there anything in his personal history worth considering at length. His complaint is of shortness of breath and pain around the heart. These symptoms began so gradually that he cannot tell just when he first noticed them. His shortness of breath is not bothersome except when he goes up hill or does heavy work. His duties, as porter are not much interfered with. The pain in the region of the heart is not continuous, but lasts a fairly long time, and radiates around the chest but not down into the arms, or into the neck.

Now from this much of this history alone what examinations do you require, and what are the possibilities of diagnosis?

A Student—I want to know some more history, if he's ever had syphilis and if he gets up at night to pass urine.

Dr. Clendening—In both cases you are on the right track, but instead of asking the patient, and getting very questionably accurate information, is there any way of finding out what you want to know by other means?

Student—Get a Wassermann reaction and urinalysis.

Dr. C.—Why the Wassermann?

Student—Because this might be due to syphilitic changes in the coronary arteries.

Dr. C.—Any other arteries?

Student—Yes, the aorta.

Dr. C.—Why the urinalysis. What things do you want to know about?

Student—to see if this shortness of breath is from nephritis. I want the 24-hour amount, albumin, casts and sugar.

Dr. C.—All right in our formula we have these two. Anything else?

Another Student—A blood count.

Dr. C.—Why? (no reply.) There isn't any objection to having a blood count, but it is just the point of these exercises, to find out the essential things, the blood count will not be likely to illuminate any point in this case.

Student III—Examine the heart.

Dr. C.—Yes, that's pretty essential. When you do so what do you find? (After some discussion.) We agree that the heart is somewhat enlarged and that there is a systolic murmur over the aortic area. What does it mean?

Aortic regurgitation.

Aortic stenosis.

Various replies—Aneurism.

Mitral stenosis.

Mitral regurgitation.

Dr. C.—Well we will defer expressing an opinion, as it might be dangerous in the face of such varied partizanships. However I will say that I do not, as far as we have gone, agree with any of you. A systolic murmur in the aortic area, almost never means aortic stenosis. Aortic stenosis is one of the rarest of human diseases. Systolic murmurs in the aortic area are very common. They are usually due to plaques of degeneration along the aortic arch. What other examinations do you wish made?

Student—Blood pressure.

Dr. C.—Good. Make it. The result is Systolic 180—Diastolic 120. What else? I think of at least 4 other things.

Student—X-ray of the chest.

Dr. C.—Why?

Student—To determine the size of the heart.

Dr. C.—Yes with a question mark. The X-ray is likely to be very inaccurate about that. What else?

Student—To see if there's an aneurysm.

Dr. C.—Yes. And if not to see if there is evidence of an enlarged aorta, in other words, a syphilitic aortitis. What are the other three?

Student—X-ray of the teeth.

Dr. C.—Why? (After discussion.) Because in the first place, this alleged heart pain

may be due to focal infection from the teeth and so may (less likely) be the dyspnoea, and in the second place, focal infection may be damaging still further an already damaged aorta and myocardium. What else?

Student—Functional test of the kidneys.

Dr. C.—Yes. Good. Because the urinalysis alone may tell us nothing of the real condition we want to know. What method will you use?

Student—Phenolphthalein test.

Dr. C.—Yes. That is good for all clinical purposes and has the advantage of simplicity. Now so far we have the following formula:

1. General physical examination, especially of heart and arteries.

2. Blood pressure.

3. Wassermann.

4. X-ray of the teeth.

5. X-ray of the chest.

6. Urinalysis.

7. Functional test of kidneys.

To these I would add:

8. Examination of prostate.

9. Ophthalmologie examination of the eye grounds because here alone in the body can we see the naked arterics.

10. Examination of the nose and throat, for other sources of infection.

All these wil be done, and will be reported to you at our next session, when the patient will reappear. Let me again call your attention to the varied means we have to employ to get all the information we want, in this simple ease. Cases of this kind are very common; they occur at least three or four times a day in this elinie. Fifteen years ago an examination of the heart and urine alone, by the internist, would consummate all our requirements of diagnosis. Now we have this morning consulted the X-ray man, the laboratory technician, the rhinologist, the oculist, and before we are through may call in the dentist, and the hydrotherapy department. In so doing I cannot align myself with those who lament the days that were. I believe that by our present day methods much more is being done for nearly all classes of cases, even cases like our patient

this morning, who have extensively damaged arterio-cardiac renal systems.

The only disadvantage that this so-called group method has is a financial one upon the patient, but this is of all things the easiest to set straight.

Out-Patient Clinic of Dr. Logan Clendening

EXAMINATION OF STOMACH CONTENTS

There has been a good deal of dispute for a number of years, in medical circles, as to the value of the examination of the gastric contents. I have here on the table everythings that is needed for a routine examination of that kind and with a patient or two we will go over the matter and try to determine its value for ourselves. (Fig. 1.) You can see at least, that the paraphernalia needed is very simple, and that the procedure does not take up much time, so that if it is valuable, the results are gained with little trouble.

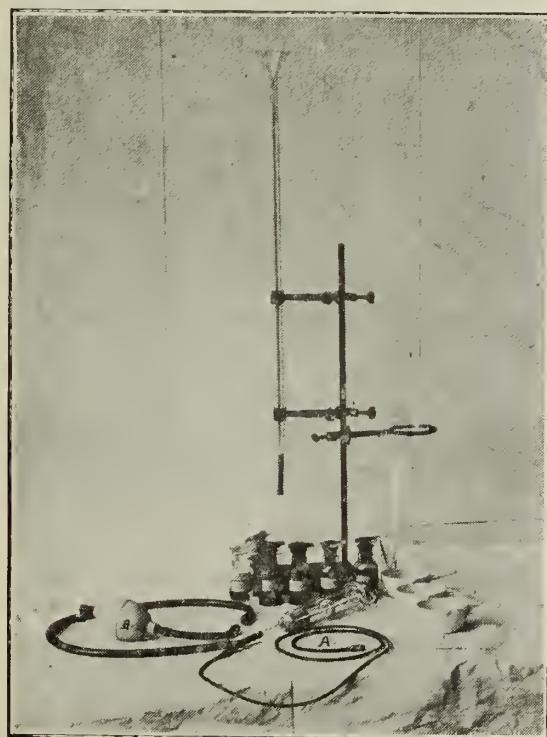


Fig. 1. Apparatus for gastric contents examination. Rehfuss tube in center—labelled "A." Ordinary stomach tube with Lockwood bulb at left, labelled "B." Reagent bottles with phenolphthalein, Di-Amido-Azo-Benzol, Alizarin, Lugol's solution, and Congo Red.

As to the technique, first the character of the meal. We order the patient to eat no breakfast, and at an hour before appearing here, to eat:

One slice white bread without butter.

One glass water.

Simple as this appears it is remarkable what difficulty you may get into with it. You will pump often butter, sometimes cracker or oatmeal, and even pieces of chicken and bacon.

It is well therefore to give your patients a little ticket with the instructions type-written out. We used to let them use either tea, unsweetened and uncreamed, but that made misunderstandings so we stick to the water. We used also to suggest either bread or crackers, but white bread calls out so much more gastric juice than anything else on account of the gluten content, that our choice is for that, and we make our list perfectly rigid, and unvarying.

An hour after the meal is eaten we remove it. As often as I am able now, I use the Rehfuss tube. This, as you see, has a small metal tip attached to a very thin rubber tube. Compare it with the old type of stomach tube and you will see how immensely more comfortable it must be. The patient swallows the bulb, often with no discomfort. While it is in he can talk and is not gagged. This tube can be left in for hours, and is so left in when studying or treating duodenal or gall-bladder affections. It can be passed into the duodenum, by putting the patient on the right side for half an hour, after which sucking on the syringe will bring up the duodenal contents. Besides the advantage of comfort to the patient, it has the added recommendation that we get much more of the gastric contents to examine than by any other method.

Occasionally you will find a patient who cannot swallow the tube at all. In that case we use the old type of tube with the Lockwood bulb, made of very thick and strong rubber.

This patient, as you see, swallows the Rehfuss tube very easily and by sucking on our glass syringe we extract about 100 cc. of

contents. It would not make very much difference if we had waited over the hour, and I have even recovered contents at the end of two hours, but at the end of an hour the gastric digestion is usually at its height.

Now that we have the stomach contents we will place them in this conical glass, and begin our examination (Fig. 2). In recording our results by far the largest amount of information will come from the gross appearances.

In the first place we record the amount. Here we have 100 cc. This is about normal with the Rehfuss tube. We usually get less with the other tube. Anywhere from 25 to 125 cc. depending upon circumstances, could be considered proper. In cases of pyloric obstruction, in many cases of ulcer, in some of gastrophtosis, and in that peculiar malady known as maladie de Reichmann, or continuous hypersecretion we get enormous quantities. In a patient in the clinic the other day, you will remember that we removed some eight or nine hundred cc. of liquid from the fasting stomach. Here then is one result of our examination. Surely such large quantities of fluid in the stomach, in a fermentative state, are not beneficial, and their daily removal should be helpful—a therapeutic hint that the man who scorns the use of the stomach tube would miss.

You will observe as we talk that the contents of the graduate are settling into two very distinct layers. There is really a third layer, on top, of mucus, but in this case it is represented only by a few flakes. In some cases the mucus is very plentiful and thick. This is often said to be an indication of gastric catarrh, or inflammation of the gastric glands. Whether it is or not, the presence of mucus is another therapeutic hint which is, I believe, of value.

The other two layers consist of the bottom layers of solid particles, and above that a liquid of tawney hue which contains the acids and other digestive ingredients that we wish to analyze. The lower layer in this case is finely pulverized into a white, powdery, flour-like mass. It is, in other words, well chymified. This indicates the presence

of hydrochloric acid in sufficient or more than sufficient quantity for digestion. If it were lumpy and poorly divided, we would be inclined to believe that there was an insufficient amount of hydrochloric acid.

Next on our gross examination we look for the presence of blood. A few flakes of clotted blood, or of bloody shreds of mucous membrane, may be perfectly normal. The sandy dark deposit of semi-digested blood we do not find in this specimen.

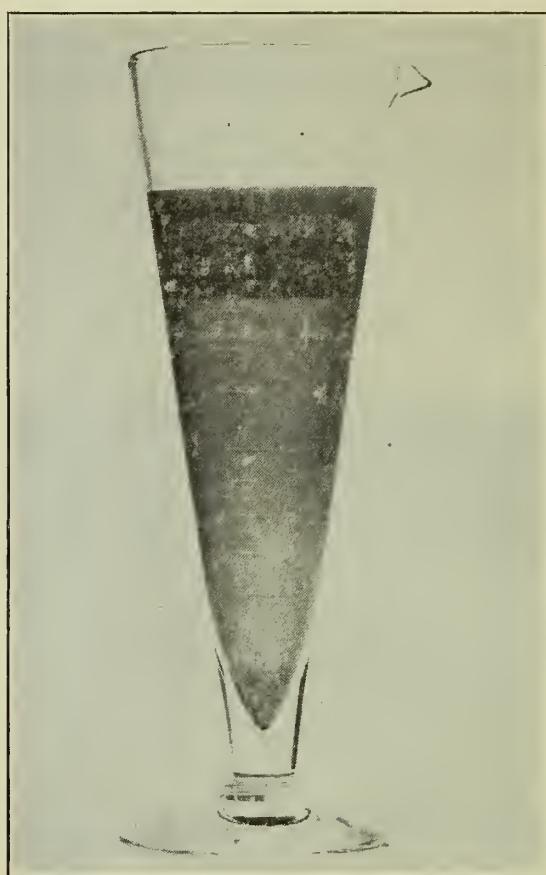


Fig. 2. Gastric contents after removal.

Last on the list, before we resort to chemical examination, we note the odor. The odor of lactic acid in any quantity is quite easily detected. The putrefactive odor of gastric stasis is also quite plain. In this case we have simply the normal odor of gastric contents after the bread meal—an animal odor, acid, and starchy.

The upper layer now we will filter and put aside three parts of the filtrate, of 10 cc.

each, for chemical analysis, titrating it against decinormal sodium hydroxide solution, dropped from this burette, and using the classical indicators of phenolphthalein to determine total acidity, di-methyl-amido-azobenzol for free hydrochloric and alizarin for the combined acids, organic acids, and acid salts.

Examination for blood and microscopic examination should also be made; in the case of suspected cancer of the stomach, the Wolf-Junghaus test should be done, and in cases of stasis the Uffelmann test for lactic acid.

These are very simple to do and easy to learn. Their significance we will consider at some later time. It has been my purpose this morning to draw your attention to the facts that we can learn from the appearance of the gastric contents, using only our eyes, and noses, and to try to convince you that those facts are neither unimportant nor insignificant.

R

Clinic of Damon Walthall, M. D.

Department of Pediatrics

FOUR CASES OF ACUTE MILIARY TUBERCULOSIS

Acute Miliary Tuberculosis is confined to no age, but is particularly a disease of childhood and is an acute general infection with the tubercle bacillus. It simulates closely typhoid fever, acute influenza, or broncho-pneumonia; and for this reason these cases are reported and discussed to bring to your attention the important factors in arriving at a correct diagnosis.

Predisposing Factors: (a) The acute process may arise from a local focus or caseating center as a cheesy cervical or bronchial gland.

(b) Often acute miliary tuberculosis of the lungs or better named an acute tuberculous broncho-pneumonia, is only a form of generalized miliary tuberculosis in which the localization in the lungs is from the onset the prominent symptom.

(c) Again acute tuberculosis is found where no caseating center can be found and it is not improbable that in such cases it is a primary infective fever introduced

from without—as, by milk giving the bovine type of tuberculosis which causes 6 to 10 per cent of the total fatalities; or by other sources i. e.—Aged people with chronic bronchitis or asthma are often carriers of the tubercle bacilli. They remain in doors, care for the children, infect the rooms and thus are a source of grave danger. Heredity is less a factor than is supposed and what is passed as hereditary is usually a direct infection from a tuberculous parent.

(d) Acute tuberculosis is prone to manifest itself in the children that are under par from nutritional disturbances or from acute or chronic diseases, i. e.—rickets and malnutrition, adenoids and diseased tonsils, chronic otitis and mastoiditis, epiphysseal and joint infections of the young, unhealthy genito urinary tract, influenza, measles and whooping cough. Thus the organisms introduced from without find suitable ground and opportunity for becoming generalized.

General Symptoms

The early symptoms of the disease are most insidious and very difficult to be sure of, mainly showing general malaise, pallor, wasting, fatigue, loss of appetite, irritability of temper and slight or marked fever. All of these symptoms may be so slight as to be attributed to worms or a trivial ailment. As the disease progresses the fever is high and irregular following no characteristic curve and there is very definite malaise with a loss of appetite and a slight disturbing cough. At first the emaciation is slow and later in the disease it is more marked. The pulse is rapid and out of proportion to the temperature, also the breathing is rapid and shallow later becoming Cheyne Stokes type. The liver and spleen are usually enlarged. If there is meningeal involvement vomiting will appear quite early.

When the disease becomes fully developed there is a characteristic grouping of symptoms—hurried respirations, prostration, slight dyspnoea, cyanosis of the lips and cheeks, which the few physical signs

in the lungs seem adequate to explain. There are rales all over the chest, mostly dry and crackling, but occasionally moist sounds are heard. The resonance is impaired but there is no dullness. D'Espines sign is positive when ever there is any enlargement of the mediastinal or bronchial glands. These symptoms, with an enlarged spleen and continuous pyrexia like pneumonia or typhoid, are characteristic of acute miliary tuberculosis.

If typhoid particularly is simulated, usually all the signs are absent except FEVER which is characteristically high. Many times the physician is at a loss to determine between acute tuberculosis, typhoid, or a debilitated state that tonics will restore, and often he can only wait and watch the emaciation and fever until the finding of an enlarged spleen or perhaps a few lung signs, or rather, more frequently than is supposed in this form of tuberculosis, the finding of tubercles in the choroid which may determine the case. Still found, in eleven consecutive autopsies, ten with tubercles in the choroid. The author, while at the Children's Hospital, in Boston, found tubercles in the choroid in five out of twelve cases of tuberculous meningitis before the organisms were found in the spinal fluid.

Localized Symptoms

Local symptoms manifested by early involvement of the lungs usually occur after measles, whooping cough, influenza or broncho-pneumonia. The physical signs do not help much until the disease has progressed to some other structure as the brain.

Navarro of Buenos Aires, Argentine, calls attention to the mild symptomatology of tuberculosis in children and says the only constant symptoms are lack of appetite, tendency to lassitude and usually pallor. Most of his cases had frequent cough without dyspnoea, cyanosis, or subjective symptoms.

Tests

I. The Von Pirquet is the most widely used, and because of this the results can

be interpreted with more uniformity and reliability. A positive reaction means the presence of a tuberculous focus, while a persistently negative reaction establishes the fact that there is no tuberculous lesion, except in the extremely ill patients where a diagnosis of tuberculosis can be made any way. Bass brings out the importance of repeating the Von Pirquet before saying, "The patient is tuberculosis free." Other types of cutaneous and mucus membrane reactions to Tuberculin may be used, but none is so universally reliable as the Von Pirquet.

II. Heinman calls attention to the unfavorable reports with the complement fixation test on the blood and the varying results which each observer using the same antigen was able to obtain, thus foreclosing any reliability as to diagnosis that might be obtained from this procedure.

III. The sputum examination should always be done early even though there is no cough and practically never any expectoration. A specimen should be collected by passing a tongue stick wrapped with gauze into the throat, and after the child has coughed and gagged against it for a few times, the material thus obtained is stained for tubercle bacilli in the usual manner and the organisms will be found in a high percentage of the cases.

IV. Mildred C. Clough concludes that the acute tuberculosis is the only form in which the tubercle bacilli are circulating in the blood in sufficient quantities to infect an inoculated animal. 66 per cent of the inoculated animals showed tuberculosis. Clough also suggests the use of artificial media for blood cultures as an aid in the diagnosis of this type of disease, since the results are obtained very much more quickly than by guinea pig inoculation. The blood is collected, hemolized with distilled water and centrifuged, and the sediment planted on blood agar slants.

X-ray.

Mary Lapham describes four groups of structural changes illustrated by X-ray shad-

ows, which manifest varying stages of tuberculous involvement of the lungs, and their associate lymph system. (a) Moderate enlarged bronchial glands with no lung infiltration. (b) Enlargement of bronchial glands with early beginning infiltration. (c) Considerable enlargement of glands with marked lung infiltration. (d) Changes typical of tuberculosis as shown by a discrete mottling extending well out to the periphery of the lungs. Apical involvement may not always be present.

Pathology of Acute Miliary Tuberculosis

The characteristic pathological feature of acute miliary tuberculosis is the fact when death occurs the tubercles are still in the early stage—discrete grey tubercles—and as such are present in every organ in the body. There is, however, some variation in their appearance, depending, no doubt, partly on the duration of the disease. Thus in some cases the grey tubercles are so fine that they may be compared to grains of sand thickly scattered throughout the substance of the various organs, while others are more the size of millet seed, and in still others they may be larger, already becoming yellow, and form minute caseous foci which tend to coalesce into larger masses. The whole condition postmortem strongly suggests a blood infection. Every organ is affected and there is apparently a shower of tubercle bacilli which is scattered by the blood streams all over the body.

Treatment

(a) General Treatment. There is none up to the present date that can be said to be of any avail.

(b) Prophylactic Treatment. (1) Removal of the child from the tuberculous environment to (2nd) a preventorium i. e., a country home with fresh air pavilion, forced feeding and good hygiene; (3rd) Pasturization of all milk; (4th) Vaccination, by the introduction of dead tubercle bacilli subcutaneously producing immune and antibodies; (5th) Tuberculin given intracutaneous as advised by Jeanneret starting in with very

minute doses of one ten thousandth of a milligram, and gradually increasing the dose.

Cases

Case (1) Illustrating typhoid type of miliary tuberculosis. A Mexican girl, age 9 years, entered the hospital on Feb. 27th, 1920, after having had a fever for 17 days at home. The only other symptom described was a pain in the right side. The family and past history have no bearing on the present condition. The temperature remained persistently high for four weeks in the hospital. The last two weeks of this time it was constant at 103 F. During this period the patient showed a blood count of seven to eight thousand white cells with 65% polymorphonuclears and 35% lymphocytes. Malaria smears were repeatedly negative. The Von Pirquet was positive. On March 15th the lungs showed many rales and a very positive D'Espines sign. The patient was rapidly losing weight, appetite very poor, and a slight cough was present. The X-ray at this time showed a marked mottling, typically characteristic of tuberculosis. The child was taken home on March 26th, 1920, and died ten days later. No autopsy was obtained.

Case (2) Illustrating acute miliary tuberculosis of the lungs as a localizing symptom of generalized miliary tuberculosis. A colored girl, age 3 years, entered the hospital on March 7th, 1920. The family history is negative except the mother, age 24 years, has had asthma all her life (this is the probable source of infection.)

Present Illness: The patient had been droopy, sleepy, and showing marked fatigue, loss of weight and appetite, and a slight cough for two months. The last two weeks she has been very much worse with a high fever, marked cough, semi stuporous, and the occasional vomiting of phlegm after coughing. The temperature, pulse, and respiration on entrance was 104F; 160:56. The physical examination showed a very critically ill child, with rapid, shallow respirations emphasized by a marked grunt. Both lungs showed impairment over front and

back but more marked at the left upper. The breath sounds were rough and harsh with many crepitant and medium-sized rales throughout. X-ray of the chest shows besides the marked mottling of the lungs, characterizing typical tuberculosis, a very large heart shadow. In the hospital the condition grew progressively worse and after one week a flaccid paralysis appeared, manifesting a meningeal involvement. Lumbar puncture at this time showed a clear fluid under slightly increased pressure, no increase in the number of cells and no tubercle bacilli could be found. Death occurred March 31st, 1920.

The autopsy showed every organ filled with miliary tubercles. The brain showed two large areas of softening, one in the posterior part of the left frontal lobe, and a second in the temporal lobe beneath the sylvian fissure. There was an occasional small tubercle over the surface of the cortex, but the meninges were not studded with tubercles like the average tuberculous meningitis. The heart and pericardium were free from tuberculosis. The eyes were not examined.

Cases (3) and (4) Illustrating acute miliary tuberculosis as it manifests itself in children that are under par from nutritional disturbances such as acute rickets. These two cases, a girl, age 3 years and a boy, age 4 years, belong to the same colored family, the history of which had no bearing on the present condition. They were both fed on cow's milk during infancy, and both showed severe rickets, with very marked deformities manifesting the disease. There was anterior and lateral bowing of the long bones of the arms and legs. Harrison's groove and a rosary giving marked deformity of the chest. The head was square and the fontanelles were open. They both had had measles in the past three months after which both steadily declined in health. They were brought to the clinic, because of a cough and an inability to walk. The examination of their chests revealed, in the girl dullness over the right lower and middle lobes with bronchial voice and breath sounds and impairment over the

left lung. Many fine and medium moist rales throughout both lungs. In the boy there was dullness over the right upper and middle lobes and the left upper lobe, with bronchial voice and breath sounds. Many rales of all kinds throughout both lungs. The sputum was collected by swabbing the throat and making the patients cough and gag against the swab. Tubercle bacilli were found in the specimens from both cases. The X-ray plates of the chests and the epiphyses of the long bones of these two patients were typical of acute miliary tuberculosis of the lung and the bony changes of acute rickets.

Out-Patient Clinic of Dr. Charles C. Dennie

FAMILIAL SYPHILIS

The question of familial syphilis is a confusing one, if the father has lues how can we determine whether the wife and children have escaped. Upon what grounds may we make a prognosis? As a general rule if the father marries when his syphilis is active, that is in during first five years of his lues, the mother stands chance of becoming infected either directly or through the foetus, so that the first child is a living congenital syphilitic, the second, third and fourth are still borne or miscarriages and those in time are followed by a living child who may or may not show many of the stigmata of the congenital syphilis. If the syphilis is old in the father, the mother and children quite often escape any visible or serological evidences of syphilis.

Therefore, the only way to arrive at any conclusion concerning congenital syphilis is to make a thorough physical and serological examination of the entire family.

If the serology of the father and mother reveals positive evidence of syphilis all the children will also show such evidence. If either one of the parents are negative serologically, the children are usually negative also. But there are many cases which cannot be placed in any set classification as illustrated by the following history:

The family consisted of father, mother and seven children. There had been two deaths

in the family, no miscarriages but seven still born.

The father would never attend the clinic but the mother stated he was strong and healthy. The mother had never suffered from illness except at birth of her children and a careful physical examination revealed no signs or symptoms of syphilis. Her blood Wassermann was positive +++. She came to the clinic with the eldest child, a girl age 13, who had suffered for the last three years with "eczema" and had been treated for this disease by several physicians.

This child had been a normal delivery, breast fed, had had the diseases of childhood but had never had a cold in the head, large abdomen, eruptions on the skin or any of the signs or symptoms referable to syphilis, in fact, she had been a remarkably healthy child until this skin trouble came on.

Physical examination revealed no stigmata of congenital syphilis such as one usually finds, but both arms were covered with annular serpigenous syphilitides, typical and unquestioned. Wassermann positive. Potassium iodide and mercury soon cleared up the lesions. The mother then brought in the rest of the family for examination. The second child was a typical congenital syphilitic eleven years of age. Examination revealed bulging forehead, saddle nose, interstitial keratitis, Hutchinson teeth, lack of development of upper jaw, scaphoid scapulae, palpable liver and spleen, Wassermann blood positive +++.

The third, fourth and fifth children were typical congenital syphilites with the major part of the signs of this disease. At this time the sixth and seventh children were unborn; the mother was given mixed treatment but she followed it indifferently. The sixth child was born but never seen by me, the mother states that it has had no trouble of any kind. Within the last month the mother came to the clinic with a three months old infant. This child had large prominent veins, large abdomen with palpable spleen and liver and was covered from head to foot with yellow crusts. The mucous orifices were entirely surrounded by mucous

patches. Wassermann was positive +++, and the skin condition as well as the snuffles cleared up entirely following the second intravenous dose of 0.1 gm. neosalvarsan.

The family is of interest because of the fact that neither parent was apparently suffering from an evidently active syphilis and yet all the children were.

The first child showed no signs of congenital syphilis but rather the cutaneous manifestation of a tertiary acquired lues.

All the other children except the last were manifestly congenital syphilites.

Cutaneous manifestations were accentuated in the last child.

The sixth child was in better physical condition than the ones preceding it or the one following it because of the mothers treatment.

The syphilis seemed to be as active in the last child as in the first or even more so.

R
Clinic of H. R. Wahl, M. D.

CLINICAL AND PATHOLOGICAL CONFERENCE

The patient from whom these organs were taken came into the hospital complaining of "Pain in the stomach" and "Shortness of breath." His age was 40. The gastric symptoms began 7 weeks ago with sharp pain in the stomach, following the ingestion of food. Vomiting occurred in ten minutes followed by relief from the pain. The vomiting persisted up to three weeks ago when "he stopped eating." His respiratory difficulty began two years ago with a fracture of a rib, since which he has been short of breath. This bore no relation to exertion. Among other points of interest in the history are frontal headaches, coming on at night for the past few months, muscular cramps, and tingling and numbness of the hands and feet, tinnitus and a chancre in 1904.

The physical examination was practically negative as far as the gastro-intestinal tract was concerned. The examination of the chest showed dullness on the right side and the internist suspected an empyema associated with a thickened pleura. The temperature curve was remittent in type varying

from 99° to 102°F. The respirations and pulse were rapid the former averaging 32 and the latter 110. The blood count showed 11,000 w. b. c. 3,000,000 r. b. c. and 70% hemoglobin. The sputum showed staphylococci and streptococci, but no tubercle bacilli. While his appetite was poor his gastric symptoms were not prominent during his stay in the hospital, his main complaint having been pain in the right side on breathing and persistent cough. Hyaline casts and a trace of albumen was found in the urine. A thoracentesis was performed but no fluid was obtained. An X-ray was taken of the chest and showed what the roentgenologist interpreted as "tubercular deposits." The patient died eight days after admission.

What was the clinical diagnosis? The gastro-intestinal tract was considered of little importance. The main lesion was thought to be in the chest where the physician expected a thickened pleura with an empyema or an encysted abscess. Death was ascribed to a terminal broncho-pneumonia. The internist did not agree with the X-ray diagnosis especially in the absence of fluid.

We have here the organs and lesions found at the autopsy. On opening the peritoneal cavity there was a considerable amount of clear straw-colored fluid and the peritoneal surface was studded with small, flat, elevated, irregularly rounded, yellowish placques 2-5 mm in diameter. You will note that they are typical milary tubercles with caseous centers. They are larger than usual. The viscera are matted together, associated with numerous adhesions and are difficult to separate. The tubercles are uniformly distributed, indicating that they came from some common source at about the same time, inasmuch as they seem to be of the same age. We also see that the spleen and the liver show these same tubercles as does also the kidney. Where did these tubercles arise? This should be constantly borne in mind in the further examination of the viscera. Towards the root of the mesentery we note that there are several enlarged caseous lymph nodes some 2-3 cm in dia-

ter. Some of the caseous material may have involved a large lymph or portal vessel permitting the bacilli to be discharged into this vessel from which they were disseminated. This is not provable because the spleen and kidney are also involved, showing that the infection was not limited to the portal circulation, but involved an infection of the systemic vessels and a general blood infection. A cut section through the liver shows numerous small translucent granules uniformly distributed. Similar milary tubercles are scattered throughout the substance of the spleen. In the latter they are larger.

Now, let us see what was found in the chest. There is one lung, the right lung, all lacerated and torn to pieces with only a few tags of the pleural surface adherent. This lacerated condition is due to the fact that the entire pleural cavity was obliterated by dense, firm, pleural adhesions, involving also the diaphragm so that the latter had to be cut through and the lung tissue torn in order to get the lung out. Note that throughout the lung tissue there is a uniform distribution of soft gray translucent nodules 2-3 mm in diameter. The uniform distribution is important as it indicates a hematogenous rather than a lymphogenic or bronchogenic dissemination, because in the latter the milary tubercles are grouped in grapelike clusters about either the bronchi or lymph vessels, while the intervening tissue is uninvolved. At the apex of this lung there is a ragged cavity about 2 cm in diameter, a typical tuberculous cavity. The next striking lesion is the marked thickening of the pericardium where it joins with the pleura. Note also that there is considerable lung tissue still adherent to this union of the pleura and pericardium, which measures 1.5 cm in thickness in some places. The inner surface of the pericardium shows patches of small gray tubercles some extending over the visceral pericardium on the auricles, in other words we have here a tuberculous pericarditis. This is a rather unusual form. In most cases there is a fibrinous exudate on the surface of the pericardium. Now let us cut

through this thickened pericardium and what do we find?—large, irregular, flattened, encysted masses of caseous material surrounded by smaller grayer tubercles. In other places there is only thickened fibrous tissue. In other words we have here a tuberculous pleurisy in which the exudate was dry and became encysted between the pericardium and pleural surface of the lung. This type of pleurisy is less common than the serofibrinous type where there is more fluid. The thickened pleura was most marked on the right side but also extended to the left side where the lung was similarly peppered with miliary tubercles.

Thus far we can see that we are dealing with acute generalized miliary tuberculosis but our postmortem examination would be incomplete unless we found the source for this infection. It is almost always found if carefully sought. Let us see if we can find it. The uniform distribution of the tubercles indicates a hematogenous dissemination, so we can eliminate the possibility of the discharge of the bacilli from the tuberculous cavity in a bronchus and aspiration from it to other bronchi. We must look then for the rupture of a caseous mass into a vein. We see no evidence of such a process about the tuberculous cavity, though of course the vessel affected may be so small as not to be recognized with the naked eye. We note that the lymph nodes about the hilum of the lungs and the trachea are much enlarged, some of them are softened with caseous material. Some of the nodes are large, indurated and show much fibrosis indicating that they represent the older foci if not the source. The pleural condition with the marked fibrosis is also an old process. Frequently, a tuberculous lesion in the lymph nodes may rupture into a small vessel or vein which receives the bacilli and distributes the bacilli first to the right heart, then to the lungs and some passing through the pulmonary capillaries are distributed all over the body. In other cases a caseous tubercle in a bronchial lymph node may rupture into a lymph vessel and discharge

the bacilli in this vessel which transfers them to the thoracic duct from there to the right heart, the lungs and the rest of the body. We do not find any evidence of such an accident. There is one more possibility, we have not examined the heart carefully. We noted the presence of miliary tubercles on the outer surface of the right auricle. On closer inspection we note that the myocardium is thickened and indurated and contains some irregular yellowish areas. Let us open the auricle and wash out its bloody contents and, here we have it, a caseous mass about the size of a bean projecting into the streaming blood and from which bacilli may constantly be discharged into the blood.

Having found the source for the hematogenous dissemination of the tubercle bacilli let us trace the probable course of events. The oldest lesions are the tuberculous cavity in the lungs and the large bronchial glands and the latter seems to be the older of the two. Tubercle bacilli may have entered the lymph nodes from the tonsils or by way of the lymphatics from the lesion in the apex in the right lung getting into the latter from the air and up the bronchi to the air sacs. From the lymph nodes the infection spread to the adjacent pleura producing the tuberculous pleurisy. From this the infection spread to the pericardium and to the peritoneum. From the pericardium tubercles extended into the thin myocardium and soon penetrated through the endocardium and discharged bacilli directly into the blood stream. These bacilli lodged first in the capillaries of the lung, but some passed through and entered the left side of the heart and were disseminated in the various viscera of the abdominal cavity.

The pleural thickening and adhesions are not a recent process but require months to develop. One point in the history is of interest in this connection, viz; the shortness of breath began with a fractured rib two years before. There is often a definite association between trauma and tuberculosis of the pleura and of the lung.

Acute generalized miliary tuberculosis is responsible for more errors in clinical diagnosis in my experience than any other single condition. So frequently, the clinicians have made a positive diagnosis of typhoid, septicaemia, lues, malnutrition or are at a loss as to the nature of the condition and at the autopsy the organs are found riddled with miliary tubercles. Even the tuberculin skin test may be negative in these cases and lead the physician astray. The development of the use of the X-ray in the diagnosis of chest conditions has made the antemortem diagnosis of miliary tuberculosis much more common so that the X-ray places the clinician on the right tract while there is still a chance to do something for the patient. In this case the X-ray revealed the nature of the condition in the lungs, though it failed to reveal the thickened pleura and the large caseous masses at the hilum of the lung. The gastro-intestinal symptoms are in part explained by the tuberculous peritonitis.

R

Birth Statistics, 1918..

Washington, D. C., May 10, 1920.—In the birth-registration area of the United States 1,363,649 infants were born alive in 1918, representing a birth rate of 24.4 per 1,000 population. Of this total number of infants born alive 1,288,711 were white and 74,938 were colored. The total number of deaths in the same area was 1,014,620, or 18.2 per 1,000. The births exceeded the deaths by 34.4 per cent. For every state in the registration area, for most of the cities, and for nearly all the counties, the births exceeded the deaths in many cases by considerable proportions. The mortality rate for infants under 1 year of age averaged 101 per 1,000 live births. The foregoing are among the facts brought out by the annual compilation of birth statistics by the Bureau of the Census.

The birth registration area, established in 1915, has grown rapidly. It comprised in 1918, as in 1917, the six New England states, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, New York, North Carolina, Ohio, Pennsylvania, Utah, Virginia, Washington, Wisconsin, and the District of Columbia, and had an estimated population of 55,813,339, or about 53 per cent of the estimated total population of the United States in that year.

The birth rate for the entire birth-registration area fell below that for 1917 by two-tenths of one per 1,000 population; but the death rate was greater by 4.1 per 1,000 than in 1917. Thus the excess of the birth rate over the death rate for 1918, which amounted to 6.2 per 1,000, was somewhat less than the corresponding excess for 1917, 10.5.

The infant mortality rate—that is, the number of deaths of infants under 1 year of age per 1,000 born alive—throughout the birth-registration area as a whole was 101 in 1918 as against 94 in 1917. This is equivalent to saying that in 1917 of every 11 infants born alive 1 died before reaching the age of 1 year, whereas the ratio in 1918 was about 1 in 10. Among the 20 states these rates ranged from 64 for Utah to 140 for Maryland, and for the white population separately the lowest and the highest were 63 for Utah and 126 for Pennsylvania.

The infant mortality rates vary greatly for the two sexes and for the various nationalities. The rate for male infants in 1918, 111 per 1,000 live births, was nearly 23 per cent greater than that for female infants, which was only 90.4. When the comparison is made on the basis of race or nationality of mother a minimum of 71.4 is shown for the infants with mothers born in Denmark, Norway, and Sweden, and a maximum of 127.4 per 1,000 births for infants with mothers born in Poland, while for Negro children the rate was 163.

The reports from the registration area show the birth of 15,342 pairs of twins and 147 sets of triplets in 1918—in all 30,123 live births, or a little more than 2 per cent of the total number born.

The reports for 1,252,552 of the births occurring in 1918 contained information as to number of child in order of birth. Of these reports, 345,027 were for the first child born to the mother, 264,964 for the second child, 192,339 for the third, 136,366 for the fourth, and 85,963 for the fifth. In the remaining 217,893 cases, or 17.4 per cent of the entire number for which information on this point was obtained, the total number of children borne by the mother was 6 or more; in 38,343 cases it was 10 or more; in 1,820 cases, 15 or more; and in 58 cases, 20 or more. The total number of children ever born to the mothers of these 1,252,552 babies of 1918 was 4,109,309, or 3.3 per family. The reports for 1,189,682 mothers of 1918 contained information as to the entire number of children now living and gave a total of 3,461,110, or an average of 2.9 living children in each family.

**THE JOURNAL
of The
Kansas Medical Society**

W. E. McVEY, M.D. - - **Editor**

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Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

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Impressions.

If each one in attendance at Hutchinson should write his impressions of the annual meeting just held there, considerable diversity of opinion would, no doubt, be expressed but even the most pessimistic would give congratulation to the program committee and to the committee on arrangements. The opinions most generally heard were very flattering to those responsible for the meeting. It was, without doubt, one of the best meetings in the history of the Society. The attendance was also said to be the largest in the history of the Society. Possibly such is the case, but with the attractions offered at any one of our meetings, and especially at this one, the attendance should be at least fifty per cent instead of twenty-five per cent of the membership.

Our annual meetings are all characterized by a grand rush to get through. This is true whether it be a two-day or a three-day session. On the first day the papers are read with a fair amount of deliberation and the discussions are quite as interesting as the papers. On the succeeding days the papers are hurriedly read and the discussions are more and more curtailed consisting of a few scattered questions and finally not even that. There are quite too many of our most experienced men who are content to be listeners. It is by no means the

man who is always ready to talk that knows the most. However, the grand rush, with which everyone seems to be inoculated, prevents the timid man from expressing his thoughts and it also tempers the ardor of the talkative man.

Several different plans have been suggested and tried out for the improvement of our annual meetings. For a number of years we have found it profitable to have some men of national reputation on the program. This has added considerably to the interest in the meetings and has increased the attendance somewhat. It has proven a good plan and should be continued. There is no reason, however, that we should stop with this—there are certainly other improvements that could be made.

When the plan of bringing in men of national repute was proposed it was objected that our own men would be crowded off the program. For the Topeka meeting a compromise was effected and an extra day was added to the program especially for noted men. Now we crowd it all into a two-day session. There is entirely too much to be done in so short a time. We should have three-day sessions and there should be more deliberation in conducting the program and in transacting the business affairs of the Society.

Papers read by our members are limited to twenty minutes each and discussions to five minutes each. There were twenty-two papers on the program for the first day. If the morning session began promptly at nine o'clock and the afternoon session promptly at two o'clock there were seven hours for the reading and discussion of twenty-two papers, or twenty minutes short of the time allotted to the reading of that many papers without permitting any discussion. It happened, as is always the case, that several papers were not on hand. There were sixteen papers read on the first day. If twenty minutes were allotted to each paper there remained one hour and forty minutes for the discussion of these sixteen papers, or less than ten minutes for each.

We would like to suggest—for a tryout

at any rate—that at least six men be selected to write papers on as many important subjects, the papers to be limited to twenty minutes; that four men be selected to discuss each of these papers; that each paper be completed and copies sent to each of the men selected to discuss it by January 1; that each of the four men prepare his discussion and have it typed, each discussion to be limited to five minutes. This will leave twenty minutes for the general discussion of each paper. Such a plan should encourage more careful preparation of papers and a more thorough and exhaustive discussion. At least one day could be given to a program of this kind. It would not interfere with the presentation of other papers but it would add something to the tone of the program.

The President, in his address, suggested that one hour be set aside at each annual meeting for the discussion of professional welfare subjects—the every day business affairs of the doctors and the means by which the Society can be made to serve his interests to the largest extent. This is certainly a timely suggestion and it is to be hoped that at the next meeting it will be carried out.

For the first time in the history of the Society a meeting of the secretaries of county societies was held. Much good for the organization can be accomplished by an annual conference of this kind. It should become a regular feature of the annual meetings and the secretaries should be prevailed upon to attend.

The meetings of the House of Delegates show even less deliberation than do those of the general session. Matters of the gravest importance are hurriedly passed upon, reports are dispensed with and even the election of officers is conducted as if the last train had just whistled in. But the election of officers is something of a comedy. Whether someone at sometime just put one over on the Society, or whether there was at one time a resolution providing for it, it is a fact that there is nothing in our constitution and by-laws and our records show no

resolution which justifies the procedure we persist in following from year to year. At every election period someone gravely declares that no nominations are permitted and the candidates must be chosen by informal ballot. Thus we nominate and elect a president, and, except when a secretary is to be elected, our adherence to law and order ceases and the comedy begins. In the selection of other officers it seems quite a simple matter to evade this supposed rule. A member rises and without a smile on his face or twinkle in his eye, says: "Mr. President, I move that the rules be suspended and the secretary be instructed to cast the ballot of the House of Delegates for a certain bald headed doctor, now chewing gum, etc., for treasurer." The motion carries and the secretary announces the unanimous vote for Dr. Blank for the office mentioned. So the officers are elected (?). The fact is that there is no by-law, no rule and no resolution (that can be discovered) that prevents the usual form of nomination. There is no excuse for the comedy.

R

The Banquet

The banquet, given at the Rorabaugh-Wiley Tea Rooms, was certainly a success in point of attendance as well as in its menu and post-prandial features. The commodious rooms were packed to utmost capacity, and many had to go away for lack of seating space. This banquet must have cost the Hutchinson doctors a pretty sum, but they are a prosperous, generous, whole-souled bunch of fellows, and were most happy in doing everything to make their visitors happy. Yet, we cannot help wishing that these banquets at our state meetings would go out of fashion, for they are the one extravagant, laborious feature that makes the job of entertaining the Society a dreaded one.

The viands were good, though it took some time to get them delivered to the mouths of the eaters. During the interim between courses, the Wyandotte crowd, which always herds together, even to the extent of coming in their own special coach, put on a choice repertory of song and rep-

artee. This was evidently much enjoyed, and the encores, in which they led, were readily responded to.

Dr. Ross, of Sterling, gave an entertaining reading, in which he displayed his gift of impersonation and mimicry. A vaudeville stunt was given by two Hutchinson artists. Dr. John A. Dillon, of Larned, sang some Scotch songs in the vein of Harry Lauder. We all knew of Dr. Dillon's literary talent from his "Rennig Ade" articles, but few knew that he was also a gifted baritone, with a fine command of the Scottish brogue. He will be in demand at future meetings, now that he has exposed himself.

Dr. Lewis of Chicago, and Drs. Morris and Polak, of New York, made happy responses when called upon. These distinguished visitors seemed to fall right in with the informal, happy-go-easy Kansas spirit that pervaded the banquet as well as the whole meeting.

The last number was an impromptu address by Dr. Glasscock, of Kansas City. The doctor, who has for many years been an inmate of the Grand View Sanitarium, and whose sad but interesting case has been regarded hopeless by some, responded with some diffidence to the vociferous repetition of his name, instigated, we believe, by Drs. Perry, Uhls, Goddard, Karl Menninger and others, who thus wished to put on a clinic. The doctor, after he got his air warmed up, began rapidly to ascend, and when he had gotten up into the higher atmosphere he began to put on a wonderful show, such as zig-zags, loop-the-loops, flying upside down, etc. He plucked magnolias and sunflowers from the ethereal Gardens of the Gods and strewed them upon the heads of his gaping spectators. And finally when it was momentarily expected that he would catch fire and burn up in midair, ignited by his own burning eloquence, he suddenly killed his engine and came down in graceful spirals and stood in our midst, clothed and in his right mind. He seemed perfectly lucid and rational throughout the rest of the meeting.

With this last feat the crowd dispersed.

O. P. D.

Eugenics

BY THE PRODIGAL

"The word is derived from a Greek word and means nobility of birth. It is the science which deals with the influences, especially the prenatal influences, that tend to better the innate qualities of man and to develop them to the highest degree."

This includes the whole man, physical, mental and moral, and insures the survival of the fittest.

Eugenics and birth control are proposed as substitutes for war. War with famine and pestilence in its wake is nature's method of checking excessive growth of population. It is a cruel and barbarous way and is no credit to the cave-man. It is by selection, elimination and prevention that the stockman improves his herd. But the stockman's ideal, in the main, is the perfect development of the body—its size, shape, symmetry, proportion and adaptability to his use. Also to lessen the number of mouths to feed and care for, and yet to make a greater profit. With fewer in number there is less crowding and better health.

Birth control and eugenics applied to man are in line with the stockman's methods, but applied to the improvement of the human race. Man, however, is an animal-plus, and plus represents the difference between the brains of the two species. Size and quality of brain is what differentiates between the man and the brute. The tendency of a perfect brain is to a perfect body and a perfect dual life—overcrowding is a menace to a perfect evolution of either brain or body. When the animals overgrowd they kill each other off or the weaker ones starve to death and the strong survive. When the human overgrowds there is strife and wholesale killing of man by man, to get rid of the surplus population, and the weak survive. Such killing is called war. War brings on famine and disease and this is the present method of keeping down the overcrowding of population. Birth control and eugenics is the better way of checking the growth of population and is a more civilized and humane way.

It is the medical profession's opportunity and its responsibility. It is a work that every doctor can do. There is no specializing other than being equipped in medicine and surgery and to draw deeply on his common sense. He must help to select, eliminate and prevent, like the stockman.

Eugenics means better babies. In order to get better babies the parent stock must be selected. Eliminating the unfit in the human is not done by killing them off, but by preventing procreation—by sterilizing all confirmed criminals, rapists, epileptics, imbeciles, morons and all who commit murder in a passion—brain storm.

The great war, fresh in the experience and memory of millions of our countrymen and the peoples of the whole world, was a terrible object lesson demonstrating the hellishness of the present method of decimating the human family. It also brought to the attention of the public the deterioration of the race, evidenced by the fact that from one-fourth to one-third, and in some nations forty per cent, of the young men were unfit for a man's job. These are no fancy or imaginary conditions, but real facts that there is no way to plow around. The situation must be met as it is and improved by doing something to avert such another tragedy, or let the next generation fight it out in the same old way.

There is another class of undesirables it is the duty of the medical profession to help weed out—the physical weaklings. The Apostle Paul said of marriage: "It is better to marry than to burn." If the weaklings must marry—and they will—they should be instructed in the use of contraceptives. No weakling who has a soul in him wants to beget his kind. A physically unfit person who wants to do so wants to do wrong, and no man has a right to do a wrong and he should be prohibited from so doing, if it requires sterilization.

The obligation of the medical profession to human kind is greater now than at any other period in human history. It is because the medical man knows more. From the nature of his training he is less weighted

down with a maudlin sentimentality which gets nowhere and destroys the object of its solicitude and stands in the way of progress and the betterment of the race by its do-nothing attitude under the guise of sympathy. Ignorant sympathy is a vice. "Civilization has failed in race maintenance," mainly through sympathetic ignorance, false pride, gluttony and the social evil. If this degenerative process continues another century one-half of the children will be unfit—or rather misfits. Moral suasion has failed, laws have failed and it is up to the medical profession to DO.

R

Etcetera

Monkey gland capsules are now on the market.

The contented man is ever so much richer than the rich man is contented.

Equal parts of glycerine and lime water will relieve the itching in eczema.

Pyoktanin was the pus killer in by-gone days. It has petered out like other fashions.

And in those days Andrus said that fifteen grains of resorcin, in a gill of water, given during an attack of asthma, is attended with prompt relief.

To prevent cow's milk from curding into a hard mass in the stomach add a little salt to it. The excess salt has also a laxative effect. A teaspoonful of salt the first thing in the morning, on an empty stomach, acts as a cathartic.

In colds when the cough disturbs the patient at night, from two to five drops of the fluid extract of belladonna will stop the cough. It has a sedative effect. It does not cause constipation. Its primary effect is to cause dryness of mucous membranes, but its secondary effect is the opposite and is laxative.

Nerve stretching was evidently practiced in the last century. Phillip Dodridge called attention to it in that old hymn: "Awake my soul, stretch every nerve and press with vigor on." Nothing new under the sun.

Codiene is said to be a specific for the relief of all pain originating in the ovaries, whatever the conditions may be. One-half grain three times a day did the work a score and a half years ago. The result, if temporary, was grateful, but it often permanently relieved. Will it do so now?

In the latter part of the last century Woolheim of London discovered ammonium gas "which when introduced into sewage very quickly destroyed the microbes of putrefaction and of many diseases; the odor of the sewage was carried away, and in less than an hour it was both deodorized and sterilized." Some gas. Why don't we use it now?

Old Mrs. Bently: "What a lot of new diseases they have now, they didn't have them twenty years ago."

Old Mr. Bentley: "Yes, but you should remember Eliza, that we have a terrible sight more doctors now than we had twenty years ago."

An in this connection old Mrs. Partington said: "Diseases is very various. Now old Mrs. Hayze has got two buckles on her lungs and Mary Simmes is dying of hermitage of the lungs. One parson has tonsors of the throat and another finds himself in a jocular vein."

Digitalis has been used in the treatment of tuberculosis by Bernard. It is indicated in cases with low tension and with tachycardia. If treated with digitalis in the early stage of the disease the dyspnoea and cyanosis disappear, the cheeks regain their color, the patient regains his strength, the pulse becomes slower and stronger, and the rales in the chest disappear. It is given in doses of 10 eg of the dried leaves on three out of every ten days.

Obata of Tokio has discovered a definite toxicity in an extract made from fresh placenta, which injected into mice will produce symptoms closely resembling those of eclampsia. The toxicity is readily neutralized by fresh serum from normal persons, but less

readily by serum taken from women during an eclamptic attack.

An epidemic of hemeralopia, night blindness, occurred in the Serbian army during the winter of 1915. It occurred during a period when the troops were fed on dried beans, lentils decorticated rice, stale lard and white bread. No other evidences of disease were manifested. Administration of cod-liver oil was efficacious. The epidemic disappeared when fresh meat and green vegetables were supplied. Tricoyer claims the condition was due to a deficiency in the fat-soluble, "A" factor in the diet.

In a report of a deputation to the Minister of Health in England it was stated that "sanitarium treatment for tuberculosis, even when accompanied by training in a suitable occupation, had been found to be inadequate as a means of controlling the disease. The general experience has been that patients who returned from a sanitarium to their homes and former occupations were unable permanently to earn a living or maintain their health."

In a short review of the researches which are being conducted at the various laboratories the United States Inter-departmental Social Hygiene Board it is stated that at the Brady Urological Institute, Johns Hopkins University, under Dr. D. M. Davis, working with Dr. Young, a research is being conducted for the manufacture and investigation of a series of new organic compounds for the treatment of syphilis. Salvarsan is now admitted to have failed in producing radical cures of syphilis, and mercury is again being used to complete "cures." But great difficulties still exist in using mercury owing to the frequency of toxic results, especially on the kidneys. Some of the recent work in the Brady Urological Laboratory points to the possibility of employing new mercurial compounds which will be tolerated in larger quantities than the old, paying especial attention to use in the subarachnoid space."

tan Life Insurance Co. (April 1920) states: "Typhoid fever is still a source of concern to health officers in the larger cities. It is fairly certain that few cases of the disease today develop within city limits. Infection, in large measure, takes place in country places and cases are brought into the cities innocently or for treatment. These facts are clearly brought out in the investigations of the origin of typhoid fever cases made by municipal health authorities."

Dr. Bremerman, Chicago, has the only private Urological Hospital in the United States. It is located in the old Marshall Field homestead, on Prairie Ave., near the Illinois Central depot. The hospital is convenient of access and is excellently adapted for its present purpose. Dr. Bremerman should receive the encouragement due him for thus anticipating the demand for such an institution. This class of cases is barred from many hospitals and under present conditions hospital facilities for their care should be welcomed.

The Metropolitan Life Insurance Company Bulletin for May says:

"The importance of automobile accidents as a cause of death is shown by the fact that, in 1919, there were 1,332 fatalities among the nearly thirteen million policy holders of this Company. In 1911, there were only 178 such fatalities. This means that out of every 100,000 insured in 1919, 10.6 persons were killed by automobiles as against 2.3 deaths among each 100,000 in 1911. The death rate for automobile accidents is now nearly 50 per cent higher than for typhoid fever; and is about 60 per cent higher than for either suicide or homicide. The number of fatal automobile accidents, in 1906, was only 183 in the Registration Area of the United States, whereas, in 1918, the last year for which figures are available, the number had increased to 7,525."

Combining in a single apparatus the moving picture camera and the X-ray machine, Drs. Lormon and Comandon, eminent French scientists, have evolved a marvelous new

contrivance, the "radioecinematograph," which makes possible "movies" of the workings of the human body's interior organs. Medical experts attached to the American Red Cross Commission to Europe are now considering the application of the new science of radiocinematography to extensive clinical work in the centers of epidemic where the Red Cross is operating. It is hoped that its use will clear up many mysteries now surrounding diseases of an obscure nature which have so far baffled the greatest medical minds of the world.

There was recently sent to us a copy of an advertising sheet called "The New Issue," published at Wichita, apparently by a group of substitutes for doctors. In this paper is a two-column article opposing vaccination for small pox. Letters are given from seventeen Kansas physicians. Wondering at the attitude of so many of our doctors we took the time to look up the records of these men. Of the seventeen whose letters were published we were able to find but eight in the last A. M. A. Directory. Every one of the eight was a homeopath and all were old men. One of the other nine letters purported to be from the county physician and health officer at Minneapolis, Kansas. This man was county health officer there in 1900, and is now dead. As the other names do not appear in the directory we are justified in presuming that they also are dead.

In the face of such evidence the author of the article has the temerity to say: "There are a host of professional men who are beginning to doubt the efficacy of vaccination."

The United States Civil Service Commission announces an open competitive examination for physician. Vacancies in the positions of physician in the Indian Service, acting assistant surgeon in the Public Health Service, surgeon in the Coast and Geodetic Survey, and in positions requiring similar qualifications in other branches of the service, at the salaries indicated below, or higher or lower salaries, will be filled

from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion.

Entrance salaries in the Indian Service range from \$1,000 to \$1,200 a year; in the Public Health Service from \$480 for part time to \$2,400 or \$3,000 a year for full time; Coast and Geodetic Survey, \$1,020 a year, and allowance for subsistence at \$1 per diem while serving on board ship, except in the Philippines, where the allowance for subsistence is \$2.50 per diem.

Appointees whose services are satisfactory and whose salaries are not more than \$2,500 per annum may be allowed the temporary increase granted by Congress of \$20 a month.

In the Indian Service, quarters, heated and lighted, are furnished free of charge, and employees also have the privilege of boarding at the common "mess" at a very low cost. The Government furnishes all drugs and equipment and means of transportation.

Sodium Gynocardate "A" in the treatment of pulmonary tuberculosis.—Sodium gynocardate "A" is a salt of chaulmoogra oil. It has recently been suggested as a possible remedy for tuberculosis. M. Biesenthal of Chicago has recently employed it in treating ten patients at the County Hospital and the Chicago Winfield Sanatorium. Not a single patient showed any improvement of signs or symptoms and there were no sputum changes from positive to negative. In two cases acute reactions followed the injections. (American Review of Tuberculosis, April 1920.)

The rapid growth of the American chemical industry is indicated by the announcement that The Abbott Laboratories have recently purchased twenty-six acres of ground in North Chicago and will soon commence building an additional plant for the exclusive manufacture of synthetics and other chemicals.

Physicians and pharmacists are enthusiastically encouraging the idea of American independence in pharmaceutical and chemical lines.

The Abbott Laboratories is a leader in developing, under government license, such important products as Barbital (Diethylbarbituric Acid), Cinchophen and Procaine. They are also supplying Anesthesia, Dichloramine-T, Chloramine-T, Nucleinic Acid, Colchicine, Hydrastine, Sanguinarine Nitrate, Lecithin and other chemicals. Some of these have been included and will be shown in the Scientific Exhibit of the American Medical Association at New Orleans in April.

The medical and dental professions of the United States will be interested to know that the Frank S. Betz Company, of Hammond, Ind., who recently opened a complete exposition and sales room at 6 and 8 West 48th St., New York City, have purchased the entire stock and business of the Crown Surgical Instrument Co., located at 8th Ave. and 49th Street, and will retain the services of the entire Crown Surgical Co.'s organization, including Mr. A. G. Roberts, who will manage the new Betz, Store at 6 and 8 West 48th St.

The Crown Surgical Instrument Co. was organized seventeen years ago by Mr. A. G. Roberts. The business was developed to the very highest standards, and the house enjoyed a reputation for the quality of its products and services, and established it as one of the leading surgical supply houses of the world.

The Frank S. Betz Co. has heretofore operated on a direct mail order basis. The demands of the medical and dental professions are such that it was necessary to give personal service to the New York physicians and dentists, and the store at 6 and 8 West 48th St. was opened for this purpose.

With the unlimited manufacturing facilities of the Frank S. Betz Co.'s plant at Hammond, Indiana, combined with the cooperation and good-will of the Crown Surgical Instrument Company, in New York City, the medical dental profession can be assured of the very best service and the highest quality of merchandise.

Failure of the Endocrine Glands to func-

tionate properly is known to be the cause of a good many disorders that give the practitioner a lot of worry. These cases must be studied carefully and the Endocrine Gland Preparations prescribed rationally. These preparations may be used singly or in combination. Of course it is useless to give any product that the patient does not need. The thing to do is decide what is lacking and specify the gland to supply the deficiency.

The glands used by the Armour Laboratory are selected with great care and are desiccated in vacuum ovens at a low temperature to insure the therapeutic active principle of that gland's being uninjured.

R

SOCIETIES.

Cherokee County Society

The Cherokee County Society met April 6th at Baxter Springs with the following members present: Lowdermilk, F. L. McKinney, of Galena; McCormack, Wear; Cannon, Hiff, Will McKinney, Boswell, Brookhart, of Baxter; Graham of Columbus.

Paper entitled Paranoia was read by Dr. Will McKinney of Baxter Springs. This year our work will be limited to the study of Nervous Diseases.

April 20th the Cherokee County and Jasper County societies will have a joint meeting at Galena at which Dr. Hubbard of the State Hospital at Parsons will be the principal speaker. The president of the State Society Dr. Liggett will be leader in the discussion.

J. D. GRAHAM, Sec.

The Central Kansas Medical Society

The first quarterly meeting of the Central Kansas Medical Society at St. Anthony's Hospital, Hays, Kansas, April 20. The meeting was a joint meeting with the Tri-County Society and some members of the Golden Belt Dental Society. This was one of the best attended and one of the best meetings we have had for some time. There were thirty-six in attendance. Dr. C. S. Marsh, Ellis, and Dr. H. S. O'Donnell, Ellsworth, were admitted to membership.

The program was as follows:

1. Chronic Pharyngitis and Demonstrating Clinics, Dr. P. C. Anders, Hays.

2. The Early Diagnosis of Tuberculosis, Dr. C. S. Kenny, Norton, Supt. Kansas State Tuberculosis Sanitarium.

3. Osteomyelitis, demonstrating clinical results, Dr. C. H. Jamison, Hays.

4. Medical Jurisprudence, Dr. E. A. Rea, Hays.

5. Relation of Tooth Infections to Arthritis, Dr. H. B. Neiswanger, Hays, Sec. Golden Belt Dental Society.

6. Herpes Zoster, Dr. H. Z. Hissein, Ellsworth.

7. Underlying Cause of Pruritus Ani, Dr. E. A. Miller, Bunker Hill.

8. Case Histories and discussion of same, Dr. P. T. Bohan, Kansas City, Mo.

The attending doctors and their wives were given a banquet at the Brunswick Hotel. After the banquet the paper by Dr. Bohan was read. He reported six cases of lethargic encephalitis. After the meeting adjourned the doctors and their wives were entertained at the home of Dr. Hennerich until train time.

The following resolution was adopted by both the Central Kansas and the Tri-County societies:

"Be it resolved; That it is the sense of the Central Kansas and Tri-County medical societies that they endorse and approve any proposed legislation that the legislative committee of the Kansas Medical Society may make at the next meeting of the legislature."

L. V. TURGEON, Sec.

Wilson County Society

The Wilson County Medical Society met at Fredonia April 13, and after a 7 o'clock dinner, meeting convened at the Commercial Club rooms.

The meeting was informal, no cut and dried papers were read. Cases were reported and discussed. Several matters of importance were taken up.

It came to light that physicians in Wilson county are getting about thirty per cent less for their work than physicians in neigh-

boring counties. A committee composed of the President and Secretary of the local society and Dr. F. M. Wiley, of Fredonia was appointed to draft a new free bill. This will be done at once and the society called together for its consideration.

Some of our members have found it expedient at different times to consult with osteopaths. It was the sense of this society that this is a mistake and it was unanimously agreed to discontinue the practice. The same to hold in the case of any physician who is ineligible to membership in this society.

In order that our own members be given a fair deal, it was agreed that physicians in neighboring counties be notified of our action regarding osteopaths, chiropractors and ineligible physicians. Therefore, the following resolutions were adopted and the secretary instructed to mail to each physician in Chanute, Earlton, Thayer, Cherryvale, Independence and Longton.

"Resolved, that it is the consensus of opinion of this society, that it is unethical and unprofessional for any member of this society, to work or consult with an osteopath or chiropractor.

That it will be deemed unethical by members of this society for any physician or surgeon in a neighboring county to consult or work with any osteopath or chiropractor in this county; or with any physician in this county who has been denied membership in this society or who is now eligible to such membership.

That the secretary be instructed to send a copy of these resolutions to ethical physicians and surgeons in neighboring counties."

Meeting adjourned to meet on call of secretary.

E. C. DUNCAN, See.

R

Stafford County Society

The Society met in Stafford at 3:00 p. m. April 14, Dr. J. C. Butler, presiding. Those attending the meeting were J. C. Butler, W. L. Butler, T. W. Scott, W. S. Crouse, Stafford; L. E. Moek, C. S. Adams, J. T. Scott, St. John; W. C. Bundrant, Hutchinson.

Dr. W. L. Butler read a paper on Scarlet Fever which was discussed by all present.

Dr. J. T. Scott was selected as delegate to the state meeting in Hutchinson.

Society adjourned to meet in St. John the second Wednesday in May.

J. T. SCOTT, See.

Decatur-Norton County Society

The Decatur-Norton County Society met in Norton, April 25. The following program was presented:

President's Address, H. O. Hardesty.

The County Health Officer, A. Bennie.

Neurasthenia, W. H. Hazelton.

Major Surgery in Small Town, C. W. Ward.

Report of Secretary, C. S. Kenney.

Election of officers for 1920. (Result of election not reported.)

C. S. KENNEY, See.

R

Shawnee County Medical Society

The regular monthly meeting of the Shawnee County Medical Society was held at St. Francis Hospital Monday evening, May 3rd, with an attendance of about 50 doctors.

Eleven new doctors were elected to membership, making a total of 119 members.

The following programme was given:

Vesical Calculus in Infant, Dr. C. R. Silverthorne.

Results of Oral Sepsis (Case report), Dr. W. C. McDonough.

Intussusception, Dr. W. D. Storrs.

Fraiture (old) of the Femur, Dr. W. D. Storrs.

Osteitis Fibrosa Cystica, Dr. W. D. Storrs.

Exophthalmic Goitre, Dr. W. D. Storrs.

Chareot Joint, Dr. R. B. Stewart.

Following the meeting a luneh was served.

E. G. BROWN, Sec.

R

Medical Society of the Seventh District

The Medical Society of the Seventh District will meet in Hutchinson, June 10th. There will be afternoon and evening sessions. The program prepared is as follows:

Dr. J. D. Gibson, Denver, Colo., "Tuberculosis." (Illustrated.)

Dr. E. M. Seydell, Wichita, Kan., "Otitis Meningitis."

Dr. C. B. Franciseo, Kansas City, Mo., subject to be announced later.

Dr. T. G. Orr, Kansas City, Mo., "War Amputations." (Illustrated.)

Dr. C. Klippell, Hutchinson, Kan., "Fractures."

Dr. E. E. Morrison, Great Bend, Kan., "Cancer of the Prostate."

Dr. W. A. Baker, Leavenworth, Kas. Subject to be announced later.

W. F. SCHIOOR, Secretary.

B

Stormont Medical Library

The Stormont Medical Library is maintained as a department of the Kansas State Library. Members of the Kansas Medical Society have the privilege of withdrawing books from any department of the library for periods of ten days each. Where books are delivered at library expense, it is expected that those withdrawing the books will reimburse the library for such expenditure. Books will be forwarded to any part of the state.

The Stormont Medical Library is maintained primarily for the members of the Kansas Medical Society. Write the librarian immediately for the book you need most. If you do not know the author of the book, give the title. If you do not know either, just tell the librarian the subject that you are especially interested in, and he will send you the latest book on the shelves on that subject. Do not procrastinate. Write right now.

Books added to library during April, 1920:

Albee. Orthopedic and reconstruction surgery. 1919.
American academy of ophthalmology and otolaryngology. Transactions, 1919.

American medical directory. 6th ed. 1918.

Bashore. Overcrowding and defective housing in rural districts.

Bobbitt. What the schools teach and might teach.
Da Costa. Handbook of medical treatment. 2v. 1920.

Fairbairn. Textbook for midwives.

Greene. Little journeys into the heart of true things.

International clinics. 29th series. Vol. 4. 1919.

International clinics. 30th series. Vol. 1. 1920.

Lydston. Impotence, sterility and sex gland implantation.

McFarland. Biology; general and medical. 1918.

Medical clinics of North America. Vol. 3, Pt. 5. 1920.

Perry. Community center activities.

Progressive medicine. Dec. 1919.

Progressive medicine. March, 1920.

Surgical clinics of Chicago. 1919.

Surgical clinics of Chicago. Feb. 1920. Vol. 4,

No. 1. Sutton. Diseases of the skin. 1919.

B

BOOKS

Orthopedic and Reconstruction Surgery, Industrial and Civilian

by Fred H. Albee, M. D., F. A. C. S., Professor and Director of Department of Orthopedic Surgery at the New York Post-Graduate Medical School and at the University of Vermont. Octavo volume of 1138 pages with 804 illustrations Philadelphia and London: W. B. Saunders Company, 1919. Cloth \$11.00 net.

At no time in the history of medicine has orthopedic surgery held so important a place as at the present time and at no time has its range or possibilities been so vast as now. The rapid and extensive evolution of the corrective surgical procedures for the correction of deformities has been greatly augmented in its importance by the recent great war. Just at this time it would seem most appropriate that a text-book, covering the vast amount of knowledge and experience that has accumulated during the past ten years, should be published. And one might also add that a more competent man for its author than Dr. Albee could hardly be found. Physicians of Kansas will recall with a good deal of pleasure Dr. Albee's lecture and motion picture demonstration of his work in bone grafting. The text book covers the field of orthopedic surgery which at this time must be regarded as a very large one.

The Disease of Infants and Children

by J. P. Crozer Griffith, M. D., Ph. D. Professor of Pediatrics in the University of Pennsylvania. Two octavo volumes totaling 1542 pages with 436 illustrations, including 20 plates in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$16.00 net.

Griffith has given us an exhaustive work on the disease of infants and children. The two volumes cover every subject that may be included under that head. He has devoted a hundred pages to the feeding of infants and in that one hundred pages has said a great deal. He has devoted forty pages to the discussion of the diseases of the heart and circulatory system, and has said about

what is usually said upon that subject, but hardly as much as the importance of the subject would justify. In discussing the treatment of the diseases of the throat and nose the author generally advises that such treatment should be given by specialists; and possibly it might have been as well to leave the discussion of such subjects to the texts written by specialists. It is very satisfactory to note that the author is more conservative in his management of such cases than is the average specialist or general practitioner. The work is well written, very comprehensive and thoroughly up-to-date.

The Medical Clinics of North America

Volume III, Number IV (The Boston Number, January 1920) Octavo of 316 pages, 43 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Published Bi-Monthly. Price per Clinie year: Paper \$12.00. Cloth, \$16.00.

In the Boston number of the Clinics (January 1920) Dr. Henry A. Christian presents an unusual syndrome of dyspituitarism; Dr. Elliott P. Joslin has a clinic on diabetes and Dr. William H. Robey one on pericarditis. There are ten clinics from the Massachusetts General Hospital by Minot, Lord, White, Lee, Rockemann, Means, Fitz, Talbot, Cobb and Spooner. Among these the clinic by Dr. Means on hyperthyroidism is especially interesting, showing the value of metabolism determination in the diagnosis of borderline cases and in estimating the progress of the cases.

The Surgical Clinics of Chicago

Volume IV Number I (February 1920.) Octavo of 231 pages 83 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Published Bi-Monthly: Price per year: Paper \$12.00; Cloth \$16.00.

In the February number of the Surgical Clinics of Chicago, Dr. Bevan presents a number of rather unusual cases—one case in which a sponge had been left in the gall-bladder for eleven years. Another rather interesting clinic is by Wyllys Andrews—a case of chronic cholecystitis and cholelithiasis with a positive X-ray diagnosis. Then there are clinics by Eisendrath, Kellogg Speed, Gatewood, Kreuscher, Strauss, Carl

Beck, Carl B. Davis, McArthur, Griffin, B. F. Davis, McWhorter, McKenna, Culbertson, Cornell and a contribution by Roy L. Moodie.

Handbook of Diseases of the Rectum

by Louis J. Heischman, M. D., F. A. C. S.; Professor of Proctology, Detroit College of Medicine; Proctologist, Harper Hospital; etc., with two hundred twenty three illustrations, mostly original, and four colored plates. Third edition revised and rewritten. Published by C. V. Mosby Company St. Louis. Price \$5.00.

Although this is a complete revision the author has not seen fit to make very many changes. Wherever possible the descriptions have been amplified and many new illustrations have been added to further elucidate the details of operations. Very special attention is given to local anesthesia. The book is wonderfully well gotten up and from a mechanical standpoint is superb.

Standard Nomenclature of Disease and Pathological Conditions for the United States

First edition. 350 pages. Published by the Department of Commerce, Bureau of the Census, Sam L. Rogers, Director.

We quote from the preface of this first edition: "The need of a standard nomenclature of diseases and disabilities has long been felt, and repeated but unsuccessful efforts to popularize such a nomenclature cover a period of more than 50 years. *****

"To make possible medical discussion and to facilitate the interchange of ideas, therefore, it is necessary that we all speak the same medical language, that we all call the same diseases by the same names, that we all call, for example, the febrile condition resulting from infection with the bacillus typhosus, either typhoid fever, or else enteric fever. It makes no difference which we call it so long as we all call it by the same term and understand what the term means.

"Particular emphasis should be given to the fact that the medical nomenclature here presented is a first edition and consequently far from perfect. Free criticism is earnestly solicited from all, that each succeeding edition may be an improvement upon the preceding one."

Principles and Practice of Physical Diagnosis

by John C. DaCosta, Jr., M. D., Ex-Associate Professor of Medicine, Jefferson Medical College, Philadelphia. Fourth Edition. Thoroughly revised. Octavo of 602 pages with 225 original illustrations. Philadelphia and London: W. B. Saunders Company. 1919. Cloth \$4.75 net.

The fourth edition of DaCosta's Physical Diagnosis has recently been received. It has been thoroughly revised and considerable new material added. There is much new matter concerning the lungs and heart. The subjects of gas edema, gas pneumonia, influenzal pneumonia and hilus tuberculosis are discussed; also the subjects of effort syndrome, functional capacity of the heart, aviator's heart, and sino-auricular block. The various improvements in technical methods are described. Some new illustrations have been added and the text generally brought up-to-date.

ELECTRO-THERAPEUTIC WEEK IN KANSAS CITY.

Dr. Burton B. Grover will deliver his second course in Electro-Therapy at the Little Theatre, May 24-26. Dr. Jefferson D. Gibson of Denver will give a special demonstration of his technique in Tuberculosis. Classes limited to those who register in advance. Tickets for entire course \$25.00. The Western Electro-Therapeutic Association will meet May 27-28. For program address, Dr. Charles Wood Fassett, Secretary, Kansas City, Mo.

Dr. McKay's Sanitarium 2902 E. Colfax Ave., DENVER, COLO.

A Thoroughly Equipped Ethical Institution for the treatment of

Alcohol and Drug Addictions

Dear Doctor.—Our method renders the treatment of **Morphinism** as painless as an operation under anesthesia. Write for brochure and reprints.

Yours fraternally,
JNO. H. MCKAY, Med. Dir.

Special Rates to Patients from Distant States

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the Act of Congress of August 24, 1912, of the Journal of the Kansas Medical Society Published Monthly at Topeka, Kansas, for April 1, 1920.

State of Kansas, County of Shawnee, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared W. E. McVey, who, having been duly sworn according to law, deposes and says that he is the editor of the Journal of the Kansas Medical Society and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of Publisher—W. E. McVey, under direction of the Council of the Kansas Medical Society	Post Office Address Topeka, Kansas
Editor—W. E. McVey	Topeka, Kansas
Managing Editor—None.	
Business Manager—None.	

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)

Kansas Medical Society, Dr. Chas. S. Huffman, Columbus, Kansas, President; Dr. J. F. Hassig, Kansas City, Kansas, Secretary; Dr. L. H. Munn, Topeka, Kansas, Treasurer.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

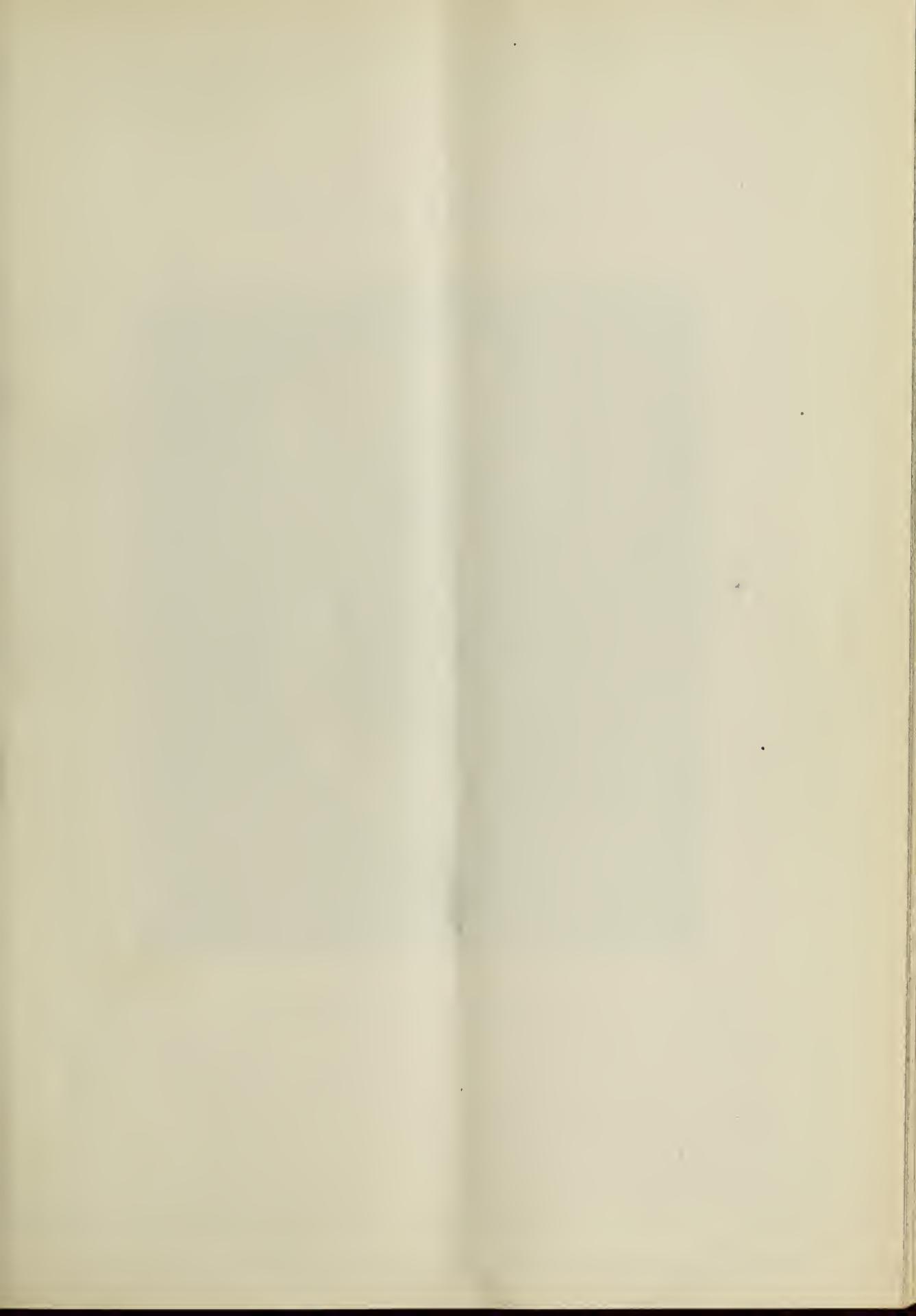
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

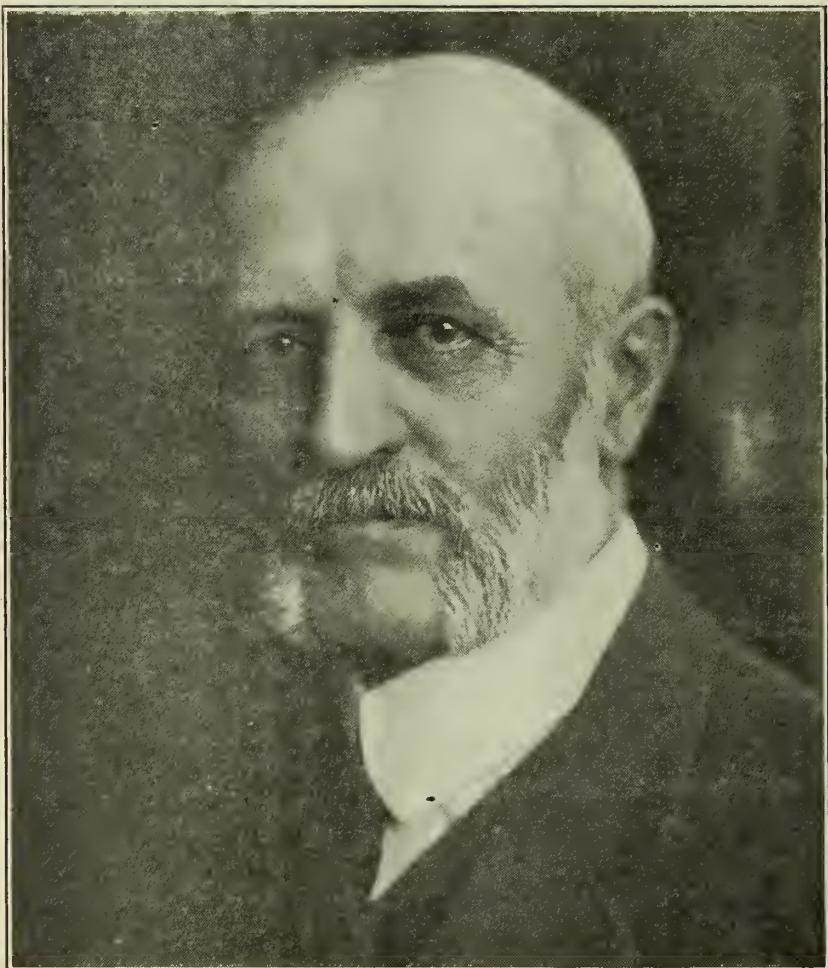
5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only).

W. E. MCVEY, Editor.

Sworn to and subscribed before me this 26th day of March 1920.

ALBERT TOMSON,
(Seal) Notary Public.
(My commission expires June 6, 1921.)





DR. C. KLIPPEL,
President Kansas Medical Society

(CAT)

THE JOURNAL

of the

Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, JUNE, 1920

No. 6

PRESIDENT'S ADDRESS

Past, Present and Future

BY ELMER E. LIGGETT, M. D., OSWEGO, KANSAS

Delivered at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

After more than fifty years' existence, it seems worth while to take stock of ourselves to determine what we have done, or what we may do to make it advisable for an eligible party to join us, and become an active member. In other words what has been done, what is being done, and what may be done, first, for the commonwealth, second, for the general profession, and third, for the individual members of the Society?

If a young man living in your town, having located there last June, after graduation from high grade medical school, being yet in debt a thousand dollars for his school or location expenses, and perhaps having a wife and a new baby to provide for, were to ask you whether or not he could afford to take the fifty dollars the attendance on this meeting would cost him, and lose the fifty dollars he might earn during your absence from his town, and spend this money joining this organization and attending this meeting, what would you tell him? Could you honestly advise him that it is worth while? Would it be fair to him and his family to encourage him to do so? Or would it be better for him not to come in at this time?

The members of the Society have always been intelligent, progressive, and up to date citizens, and I venture to assert, that every good thing for the State, medical or otherwise, has had their hearty support. Further

no body of scientific men, whose purpose in life is helpful to the general public, can meet annually to consider benefits to the common wealth, without doing a large measure of good to the entire population of the state.

In an effort to help answer these questions I have selected as the title of my address, "The Kansas State Medical Society, Its Past, Present, and Future." The theme of the address is the past accomplishments and future possibilities of the Society. The purpose of the address is to summarize the things that the Society has done, or may do to make it worth while to join it; to collect in a comprehensive body, "talking" material or "dope" that may be used in soliciting new members. With this idea in view I have gathered information and accepted suggestions from many sources, but I especially want to thank Drs. Crumbine, Huffman, Davis, Hassing and McVey for their help.

During the first fifty years the Society's function was purely scientific, and polities and legislation were out of its sphere; so that we do not find our Society has been much of a factor in State legislation for the commonwealth. For this reason it is hard to cite many specific actions that apply directly, and only, to the lay people of the state.

An exception to his legislative inactivity was the solid backing given to the enactment of the law passed in 1879, requiring of medical practitioners, a higher standard of knowledge and skill. Said law being primarily for the benefit of the sick and ailing people of the state.

Again the State Society used all its influ-

ence for, and urged the passage of, the law establishing the State Board of Health, and has been behind every amendment tending to strengthen this law, or to make it more effective.

For the benefit of the profession in general we have the same Practice Act of 1879, with the amendments and changes made since that time. This Act, and its amendments have been supported by the State Society and have tended to elevate the standard of excellency of every person practicing the healing art in Kansas.

Our membership was rarely over three hundred until 1904. At that time the Society was re-organized and grew rapidly to the total of twelve hundred. Our largest membership was in 1917, when we had fifteen hundred members.

Until quite recently our Society was purely a scientific body. Material benefits expected from other organizations were supposed to be out of harmony with the traditions of medicine. Only lately has any attempt been made to widen the scope of the Society's usefulness to the individual members.

As a profession we had long been the prey of designing persons, and predatory lawyers, who sought every possible way to rob us, by unjust mal-practice suits. This became so bad that we were compelled to league together in self defense.

A committee was appointed to draft a plan for the protection of our members against such suits. This plan was put in operation, and was immediately effective. We were able to make it exceedingly difficult for these birds of prey to plunder our members, chiefly because it became more and more difficult to get any physician to testify in these unjust suits, against a colleague, who had the support of the organized profession of the state.

This first effort to use the organization for the material benefit of its members has been very successful, and has already saved many members a deal of worry and money. Another important gain is that it demonstrates the possibilities of further useful-

ness, and has induced a solidarity among the members, which will make easier other actions along similar lines.

At the mid-winter meeting of the Council a Doctor's Credit and Collection Bureau was proposed. This has possibilities of even greater benefit to the membership than has the Medical Defense Board. The plan for this Bureau is being worked out, and ultimately will mean the elimination of the dead beat from the doctor's clientele.

Such agencies for mutual help should make a strong appeal to the members of the Society; and one, who does not take full advantage of them, is not exercising the highest business acumen, which his own self interest dictates.

At the Council meeting it was also arranged to publish a Directory of the physicians of the state, and we have a nice list of advance orders for this publication. This new Directory will prove an excellent thing in many ways, and will provide a card index of the profession, without much expense to the Society.

I would suggest that this card index be of the envelope variety, and that the members of the Society be encouraged, and urged, to send in clippings referring to any member of the profession, so that these clippings may be filed in his envelope, for future reference. This information should be accessible to any Society member by application to the Journal office. The hospitals should be indexed in the same way, and clippings kept of their doings.

The Stormont Medical Library is quite complete. It belongs to the Society, and is very valuable.

It is well up to date as far as shelf books go, but more journals should be taken. The best medical reference library is made up largely of current medical literature, and if the best journals were taken and card indexed, it would add much to the value of this library.

We have not had a report from the Library for several years, and some of the members may not know of its existence. There has been no catalogue published for

some time, and it is now kept as a card index, which of course can only be consulted at the Library, so our members are not using the Library more, perhaps because they do not know what books it contains.

The Assistant Librarian says he can at least furnish us with the lists of new books.

Dr. McVey suggests that if this Library is catalogued, a few pages of the catalogue could be published each month in the Journal.

Dr. Davis suggests that permanent quarters might be obtained for it in the State Memorial Building, with the Academy of Science. This Library is too valuable an asset to be neglected, and should be used more freely than it is, and be of more service to the profession.

The Committee on History of the Society, has worked faithfully. Their task is so large that, as yet, they can only recommend further work to be done. After fifty years a history of the Society should be incorporated into a volume, that would be an inspiring addition to every members' library. I hope a committee will be authorized to produce such a book.

The improvement of the Journal during the past year has been very noticeable, but the unit societies have not been as fully represented as they might have been. Doctors, as a rule, have not the reportorial sense, and County Secretaries, in their reports to the Journal, overlook many things of interest to the general profession, such as changes in locations, vacations, post-graduate work, visiting doctors, births, deaths, marriages, etc. in the doctors' families. Reports of these, and other like occurrences would add greatly to the interest of the Journal, and materially benefit the State, as well as the County Societies.

A large measure of the success or failure of the County Society depends upon its Secretary's efficiency, his willingness to work, and his diplomacy in handling the situations, which sometimes arise in the organization. Since the work of the Secretary is so important it would seem wise to have an annual Secretaries' meeting, in

which they could discuss their various plans, get ideas and help from each other, and outline a uniform course of action. This would be conducive to the general welfare of the Society, and give inspiration and encouragement to the individual Secretaries.

This annual meeting could be arranged out of program hours at the State meeting, or in conjunction with the mid-winter Councilors' meeting, or at any advantageous time. It has been arranged that a preliminary meeting be held during this session.

Another innovation that would be well worth trying would be a "good for the order" hour, in which any member could make suggestions for the benefit of the Society. If only one suggestion of value was offered, and accepted each year, and this suggestion had the active support of the whole Society, definite progress would be made, benefiting the commonwealth, the general profession and the individual member.

During the year a plan was proposed for the consolidation of several groups of two or more weak county societies into strong single unit organizations. If carried out this will increase the interest of the membership so strengthened, and will accomplish many things for them, both in an educational and business way. I heartily commend this plan, and advise everybody interested to help push it to completion.

If the School of Medicine would arrange a post-graduate, or polyclinic course, open to all the physicians of Kansas, it would be of great value to us, and would bring the school and profession into close working harmony. Such a course would gain, for the school, the enthusiastic support, and good will of the profession as nothing else could. I urge that this action be considered seriously, and opportunity for such a course be given.

We believe that a new Medical Practice Act, which would be just to all concerned, could be passed easily at the next regular session of the legislature. The present administration took no action in this matter

believing that the new President and his Committee should be unhampered by previous proceedings. However this subject should have early consideration.

The Free Dental Inspection law, as passed by the last legislature, is not satisfactory. It would be well to prepare an entirely new law, which would provide adequately for free physical examination, including dental inspection, of all school children. A strong well selected committee should be appointed, from this Society, to confer with a like committee from the State Dental Association, for procuring this new law. This new bill, would have the advantage of leaving the present Medical Practice and Dental Inspection Acts unchanged, in case of its failure to pass.

Nearly the same steps would be necessary to obtain the passage of this Physical Inspection law, that would be necessary to provide for the passage of a proper Medical Practice Act, and the Committee appointed for one could easily incorporate the other.

The State Board of Examiners should have the power to require that their certificates be posted in a prominent place. Each certificate should state plainly the school or sect of medicine its owner practices. It should briefly and plainly define the tenets of his creed, and his chief method of healing. It is very important that it should state, in plain figures, the grade he made in his examination, so that a person employing him might have an easy and authoritative means of judging his qualifications. If the State Board of Examiners does not have this authority, immediate steps should be taken to give it to them, and they should exercise it actively.

Let me recapitulate some of the reasons why any up to date medical practitioner ought to join, and be an active member of our State Society:

First—Membership in the organization associates him with the foremost medical men of the State.

Second—It gives him the opportunity to be of larger use to his community, and to the profession in general.

Third—He gets the benefit of the Journal, and all the news it contains, and by means of the card index he can obtain information about any physician or hospital.

Fourth—A card or request obtains the loan of any books he may need from the Stormont Library.

Fifth—It may be possible for him to have a free post-graduate course at the University Kansas School of Medicine.

Sixth—By the Medical Defense Board he is fully protected against unjust mal-practice suits.

Seventh—A Collection Agency rids him of dead beat practice, and enables him to collect all the money he earns.

Can any qualified physician afford to be without these benefits?

R

Geriatrics.

BY J. A. RADER, M. D., CANEY, KANSAS

Read before the Montgomery County Medical Society.

Dr. Jacobi, recently deceased, in 1860 began his first systematic course in pediatrics, very little interest was taken by the medical profession in this specialty. It was a difficult matter to convince physicians that the ailments of children required special attention and treatment and Dr. Jacobi met many discouragements before he succeeded in firmly establishing pediatrics as a special branch of medicine. As public interest in child conservation increased, medical interest in pediatrics increased, and today this is one of the most important branches of medical science.

Geriatrics takes up the other end of life, and relates to the science and art of the treatment of the diseases of old age. It not only includes the treatment of senile diseases, but also the care of the aged, the cause of ageing, and measures for prolonging life. The French and German physicians were the first to emphasize that the other extreme of life required special study and care; that the methods and measures successful in diseases in early life were often detrimental in the same diseases in old age; and that the natural tendency of

pathologic processes was to spread, become more active, cause further disorganization, and lead to death.

In Thewlis preface, he says, one of the most frequent questions asked about geriatrics is, at what age should the study begin? At a meeting of the N. Y. Geriatric Society, the surgical aspect of the aged was discussed, and the surgeons present limited their remarks to cases over seventy years of age. This is the general impression, but it is erroneous. There are cases at the age of thirty who present senile changes including arteriosclerosis and calcareous degeneration of the arteries without apparent cause. These cases are what we would call precocious senility, it falls within the scope of geriatrics. Many persons at, or just past forty-five, present senile changes which should not appear until seventy or later.

Dr. Nascher says an incident occurred in his early career which led him to a closer study of the senile organism, that during my student days back in the early eighties, an instructor took a number of students to the almshouse to see cases. An old woman hobbled up to the instructor with some trivial complaint. He afterwards told us that she was suffering from old age. And what could be done for her? Nothing. Suffering from old age and nothing could be done to relieve her suffering. Is old age, then, a disease from which those who had reached advanced life were doomed to suffer? This incident as vivid today as it was nearly thirty-five years ago, laid the foundation for the branch of medicine to which I gave the name **Geriatrics**.

"Mistakes are made daily in the treatment of the aged and the normal mortality of advanced life is considerably increased as a result of the hitherto neglected study of the peculiarities of the senile organism. Senility is a physiologic entity like childhood; not a pathologic state of maturity. Diseases in senility are pathologic conditions in a normally degenerating body; not diseases such as occur in maturity complicated by degenerations. The object of treatment of disease in senility is to restore the dis-

eased organ or tissue to the state normal in senility; not to the state normal in maturity."

After all it is my opinion that Dr. Osler was not far wrong when he said that man was at his best at forty-five and at sixty might be chloroformed so far as his usefulness was concerned. It is said upon good authority that at thirty-six man is at his zenith both mentally and physically. This statement is at least partially corroborated in the boxing match this summer between Willard and Dempsey, the former 38 and the latter 26. It was considered a contest between youth and age, and youth won out.

The first faculty that usually begins to fail is the memory, how many people have you noticed that could memorize as well at 45 as they could at 25, there are very few. It is true that some of the faculties improve until late in life in some few. Our reasoning and judgments are much better, and should be, at 50 than they were at 25. We have had 25 years of experience, as much as the sum total of our former period of life, our memory has tabulated the ups and downs of life and as we stand, as it were, on the crest of life we begin to see in all directions, where before we mostly saw in one direction that is in the future, because youth is the optimistic period, it is also the aggressive and venturesome time of our lives. Old age and maturity is always on the conservative side of risk, there is a reason for this condition, youth can come back in case of failure in a risk, while age must always take time into consideration.

I think it is now conceded that the Germans could have won the war in '14 or '15 had their war councils and generals been made up of younger men. Von Molke, Von Khuek, Hindenburg, Loudendorf and the Kaiser himself were all past 60 and some were near or over 70, they were too conservative when their loss of men was heavy, the same thing can be said of the allies for the first three and a half years. It took the young aggressive blood of the American soldiers to change the defensive to a victorious offensive army. Youth for strength,

age for counsel, both Napoleon and Grant were young when they won their victories. Youth and age both have their sphere in life's activities, and each should be recognized in its proper place.

That the aged are neglected on every hand is self evident. There are hundreds of books, journals and societies devoted to the welfare of the child and the number is increasing year by year. There is not a journal in the world devoted to the aged. Aside from the small organizations interested in particular homes for the aged there is no general body interested in the aged. A large part of the medical profession is still ignorant of the peculiarities of the senile organism and treat them perhaps the same as the younger with probably diminishing doses of drugs and in case of death the cause will be given as "Old age". Old age is not a disease, and ordinarily is not a cause of death.

We can readily account for the public neglect of the aged. Human sympathy is universal in its scope, but not in its application. The aged become economically worthless and must remain so, while the child has a prospective and ever-increasing economic value.

The aged should be encouraged to stay in the harness, keep them at work, and if they are not severely sick, keep them out of bed, exercise in the aged is one of the best methods of preventing toxemia and in a great many cases exercise will relieve it.

R

Eptomie of Medical Practice

BY THE PRODIGAL

Progress in medicine marks the advance of civilization. The practice of medicine is coeval with pre-historic man. Human skulls of the pre-historic period having been found which had been trephined.

Self preservation is the first law of nature. The practice of medicine grew out of the necessity of man's self preservation and an effort to avoid pain and to be relieved of it. Although the practice is so old medicine is an incipient science. Its slow growth is caused by man's inability to comprehend the invisible, the intangible and the illusive

something called life. If a man could fathom life, comprehend its essence, he would be on an equality with his Creator and no more man.

Knowing his limitation in this respect and having to recognize it, makes him a self-starter in the scientific race. Since he cannot fathom the entity he begins to jot down what he can see and is conscious of life's manifestations. These manifestations are nature in action. Man sees that nature does things. That she does things one way and always the same way which is the right way. This oneness, sameness and rightness in nature's way of doing things gives man a perfect rule to go by. They encourage, direct and lead him on to learn of nature's way and how she does things. In this way man gets an inkling of the workings of the natural law in the physical and psychological world. He arranges and classifies his observations and experiences and formulates the discovery of these general laws,—the way nature does things—and this classified, systemitized arrangement of knowledge is science.

The Good Book says that it is not what goes into a man's mouth that defiles him but it is what comes out of his mouth. It was not a medical man who made that statement. The Doctor knows that it is that which goes into a man that hurts him in medicine. It makes no difference how it gets into the man's body its effect is the same, if its the wrong medicine or a lethal dose of the right medicine. A man is as dead if killed ignorantly as if he is killed purposely. The thing for a Doctor to do, if he knows not what to do, is not to do. The patient should be given the benefit of the doubt by giving him a placebo—a make-believe medicine. This does not mean that the Doctor "should do nothing too much" but that he must not guess too often.

The Book of the Law says further—that there is a medicine for each disease. It is up to the Doctor to find the medicine to fit the disease. And when he has found it he must not try to exhaust the supply nor over do the measures employed all on the one patient as was seemingly done in former times.

It is in the memory of the living when teaspoonful doses of calomel were given in the treatment of malaria; to bleed a patient until he fainted was a common practice, and especially was venesection indicated in plethoric young girls and women, once each year, usually in the spring time of the year. The skin was blistered and poultices applied on the sore to rot the flesh and thus deepen the wound; the rowl (seton) threaded through a fold of the skin to make a running sore; fever patients (especially typhoid) were not permitted to have water or other food to slake their burning thirst or to prevent abnormal waste of flesh. There was a modicum of reason in such treatment, but it was used and applied in excess, or wrongfully, too often. The right thing done too much. There was some rightness in the practice of the fathers. They prepared a foundation upon which the sons are building.

Our knowledge of medicine has to be all learned over by each generation (about 40 years) together with the forgetting to be done. It has to be learned by experience supplemented by teaching by those who have lived the practice.

There is the threadbare story of the old Doctor who carried a cube in his pocket with the name of a remedy etched on each side and, when he was puzzled in the treatment of a case, would flip the cube and the name of the remedy or what to do on the side that came up was a treatment given. This cube was labeled on each of its respective sides—puke, purge, bleed, sweat, blister and rowl. The Doctor was called to see a case of dislocated shoulder. He flipped the cube and up turned "bleed." He felt that there was some mistake and flipped it again and up turned "bleed." "Well," said the Doctor, "bleed it is." Finally the patient relaxed and fainted from loss of blood and fell off the chair. In the scramble the shoulder was jerked into place and the Doctor was convinced of the merit of the cube, if he did not understand the way and the how of it. Such fool stories create a smile or laugh or disgust. It is better to

restrain mirth for a season until the present day mistaken diagnoses tables show less than forty per cent. Consistency will be a more prized jewel. Errors will be made. But the medical man is in a more receptive mood. He knows his size. He realizes his ignorance. But he more surely recognizes the point of the compass directing him to the goal. The goal is reached by four plain highways all converging into one, viz, diet, hygiene, prevention and eugenics. Ease and facility in getting over the road with the least percentage of fraction and approximating the goal, is to cultivate the friendship and take into partnership the microscopist, the X-ray expert, the chemist and these together with the dietitian and sanitary engineer will hasten medicine over the border line into the family of science and to approximate, if never to reach, the receding goal of perfection in the practice of medicine.

With all his enlightenment and help the Doctor will continue to make mistakes; like his sins they will follow him, but there should be fewer of them. He will continue to come to wrong conclusions but he should be more guarded in his practice and do less harm and more good; know more things that are true and "not so many things that ain't so."

There are some things in medicines which are thought to be known. One of these things is that the tubercle bacillus is the cause of tuberculosis. That the patient in whose sputum this specific micro-organism is found has pulmonary consumption. Owing to man's fallibility it might be safer from a scientific standpoint to hedge a little and say that the tubercle bacillus is the **cause or effect** of consumption.

The trend of the human mind is to look for what it wants and to find what it is looking for. Then it hunts for reasons to justify its action. An excuse for making the choice. In other words desire controls instead of reason.

Such a condition of mind must be ignored by the investigator. It is the light spot seen in the eye of the patient by the beginner in the use of the ophthalmoscope which obscures the view of the fundus of the eye and its

deeper structures. The investigator must learn to ignore the light spot of desire and let the reflection of reason assert itself. Then the deeper structures will be more clearly outlined and a safer foundation laid for practice. An investigator and an experimenter must have a judicial mind. A mind that can balance the weight of evidence evenly and can see things when looking at them if they are not what it is looking for and wanting to find. There are few such judges in the courts of law and equally few in the field of medicine. This makes it imperative upon the part of the practitioneer of medicine to sift these findings through a fine mesh and accept as gold the showing of those grains only that glitter from every angle of the light. These experiments and investigations are presented in the form of statistics. "Statistics is the science of the collection and classification of facts on the basis of relative number or occurrence as a ground for induction; systematic compilations of instances for the inference of general truths."

A knowledge of the world is founded on statistics. But statistics like money are sandwiched with the counterfeit. A counterfeit is made to resemble the genuine or original. Counterfeit statistics are unlike counterfeit money in the motive of the maker. The counterfeiter of money makes it purposely and with intent to deceive. The statistician does it ignorantly but with good intent.

Keeping human fallibility in mind and the head, side and tail lights burning to reflect the right road in following statistics in the treatment of "Flu," pneumonia and kindred diseases with serums, it requires a search light to satisfy the unprejudiced mind as to who is it. When a citrus man loses on a car of fruit his return sheet is red inked and he has to make up the loss. When the serumized victim loses out the loss is scratched off. It is a case of doing something too much.

There is a faint odor of the old cube Doctor. One thing in favor of the over serum and the cube practice is the survival of the strongest. The serums are a deadly weapon in the hands of the unqualified. The old practitioner did his deadly work ignorantly.

The present experimenter does his deadly work knowingly. That is he knows wherein the danger lies. It is up to the scientifically qualified physician to frown down and help to put a stop to the promiscuous wholesale injection of all kinds and combinations of serums into the living body for every ache and pain and for every conceivable form of physical unrest.

The mass of the medical profession knows the danger of promiscuous serum treatment, and sees the too frequent fatal results. But it is hard to kick against the pricks,—to stem the fashion. However, here and there the voice of the reformer is heard in the land protesting such practice as twilight accouchements *s t* for convenience; or rendering a man toothless on suspicion; to ream out a nose and make a horn out of it to blow or snore through; to inject the patient with serum and make a cadaver out of him before his time.

Life is too cheap in the world now and the medical man has weakened his grip. There are too many human lives sacrificed as yet, in the name of medicine. However, there is a ground for hope and evidence of an awakening as the Doctor is seen tightening his belt and spitting on his hands preparing for the onslaught. The responsibility for a greater conservation of human life rests largely in the hands of the medical profession. The world war the unrest and unsettled condition of the human family has temporarily upset the mind of humanity and brought on a psychical condition never experienced on so large a scale in the world before. On the other hand the medical profession has never been so well prepared as now to meet the demands of humanity upon it. Hence the bigness of the job does not lessen the responsibility of the physician.

The world holds the Medical Profession responsible, largely, for its advance in civilization.

R

New Use for Cover Glass Forceps

Ralph Waldo Place, Somerville, Mass. (Journal A. M. A., April 24, 1920), uses these forceps in place of the ordinary cilia forceps.

BELL MEMORIAL HOSPITAL CLINICS**Clinic of Mervin T. Sudler, M. D.****ANEURYSM OF THE RIGHT SUBCLAVIAN ARTERY**

The patient today is an intelligent active mulatto. 43 years old. His family history is negative; his personal history is negative except his venereal experience. He has had gonorrhoea three times; the first time 12 or 15 years ago, the last time one year ago. He cured himself, he says, in 3 or 4 days with patent medicine. In 1918 he had a sore on his penis, which, however, healed in two weeks; there is no history of secondaries. He had no treatment until he came to the clinic five weeks ago when he was given potassium iodide and three doses of salvarsan. He has been a steward and porter. He is married; he says his wife is well but they have no children.

His present illness began with painful swelling under the right clavicle seven weeks ago. This has enlarged rapidly until now it is approximately four inches in diameter, extending downward from the clavicle, and one and a half inches outward beyond the anterior axillary border. The pain has been so intense that he has been unable to sleep and has sat up all night with it. The pain is of a boring, aching character and is continuous. There are some shooting pains down the arm. Four weeks ago, his arm became completely paralyzed, both as to sensation and motion (slight sensation under the forearm only.) The arm is also very much swollen and there is no pulsation over the radial or other artery. He states that the mass started as a small swelling in the axillary region and by the end of the week, he noticed the swelling around the shoulder and under the clavicle.

Examination shows a tumor four inches in diameter as noted, no pulsation in the tumor itself, but pulsation can be felt at its lower border. The arm is flaccid, paralyzed and swollen. There are blisters and scarring from a hot water bottle burn. The throat is negative and the teeth are good. The pupils react to light and accommodation; the heart and lungs are negative. A well nourished

and fairly well developed mulatto. The urine is negative. The blood analysis showed the hemoglobin to be 90 per cent, erythrocytes 5,000,000, leukocytes 10,000, Wassermann + plus.

Diagnosis:—The rapid growth, the pulsation at the inner edge, the loss of pulsation in the radial artery and the pain all accompany aneurysm. This history and the blood findings (a high percentage of hemoglobin and strength) would cause us to diagnose the condition as an aneurysm rather than as a new growth.

Operation:—March 10, 1920. An incision was made directly under the clavicle, dividing the pectoralis major. Following this, clots and a large amount of blood escaped. Pressure was made by the finger of the assistant over the subclavian artery until it could be clamped. This stopped the hemorrhage. The entire brachial plexus was involved, pushed aside, and clots were found all through it. These accounted for the pain and the paralysis. The cephalic vein was very much enlarged, but it was necessary to divide it. The axillary vein was pressed upon but otherwise appeared not damaged. The artery had ruptured for about one and a half inches. The incision was closed, the patient standing the operation well.

Healing:—The swelling in the arm increased rapidly, though the arm remained warm. The swelling decreased gradually, so at the end of a week, the arm was normal in size. There was a staphylococcus albus infection in the skin which delayed the healing for a while.

Discussion:—The strength of the arteries lies in the middle coat, (the media), therefore anything which produces arteriosclerosis tends to produce aneurysm. Osler aptly says the worshipers at the shrine of Venus, Bacchus, Vulcan and Mars are prone to arterial degeneration, syphilis, hard labor and wounds and excesses of war and peace all leading to this result but syphilis produces approximately 85 per cent (statistics vary from 60 per cent to 85 per cent), a combination of unusual strain and syphilis being especially favorable. This was the

reason it was so common among sailors in the days of the old sailing ships.

Aneuryism's are classified as a true aneurysm if some of the coats of the artery form a part of the sac wall; false if all coats of the artery are ruptured and the surrounding tissues form the wall.

They are further classified by adjectives describing the shape, also as to whether the coats are dissected or whether they erode into a vein, etc, (this is known as arteriovenous aneurysm and is usually caused by injury).

There are various locations commonly involved, the arch of the aorta being the most common, popliteal, femoral, subclavian and carotid occurring in the order named.

The symptoms vary with the anatomy of the part involved; unless deep in the body a pulsating tumor develops, pulsation usually ceasing in the distal portion of the artery affected, or the pulse curve may be modified. (If it is in the aorta, the pulse is different in the two radial arteries); there is swelling and pain, possibly gangrene, haemorrhage, haemoptysis, etc. This case illustrates very well some of the usual symptoms.

The type of treatment depends upon the collateral circulation and the location of the aneurysm. Naturally the treatment of aneurysm of the aorta is along physiological lines. Any means which tends to retard the flow and cause clotting helps to control the trouble, therefore pressure, digital or instrumental may help. The passing of wire and coiling it in the artery and then passing electric current through it has been used. This is an uncommon operation and, as one would suppose, is palliative only and practically never curative. The clever operation devised by Matas for restoring the continuity of the artery has unfortunately only a limited application. Then the various ligations; distally, centripitally, either one or both are historically very old and still good under the proper circumstances.

There are cases which require amputation. There are tests for the collateral circulation based largely on blood pressure.

To apply this discussion to the present

case: Syphilis is present; as to classification it is an acute false aneurysm. The treatment was removal of the clot and centripital (Anels) ligation. His collateral circulation seems fairly well established for while there is no arterial pulsation, the arm and hand are warm, and the capillary circulation under the nails seems good. The axillary vein is pressed upon but not injured. The collateral circulation is through the transverse cervical artery and the circumflex artery over the back of the scapula.

May 28:—An examination of the patient shows no motion but there is some sensation along the median nerve; pressure causes tingling down the arm. These skin sensations and deep nerve pain were not present before the operation so we hope they indicate the gradual restoration of function. The circulation in the arm is good but the radial pulse is still absent.

R

Clinic of Dr. A. L. Skoog, Department of Neurology

A CASE OF PARALYSIS OF THE SEVENTH CRANIAL NERVE

Before beginning the presentation of this case which is evidently a paralysis of the seventh cranial nerve, I wish to repeat briefly some of the essential anatomical and physiological points.

This cranial nerve is a mixed nerve not far different from any of the spinal nerves. It is composed of three distinct kinds of fibers, motor, sensory and sympathetic. The sensory and sympathetic fibers which form the minor part of the nerve are made up of a number of neurons whose pathways in the brain are not readily followed. The motor pathways from the brain cortex to their ending in the muscles have two neurons. The upper motor neuron can be traced from the lower prerolandic area through the internal capsule, through its decussation in the pons and to the seventh cranial nerve nucleus in the lower pontine region. This nucleus contains nerve cells for the lower neurons. From these cells the nerve fibers quickly pass out the pontine region at the angle between the pons and

the medulla, and going outward together with the eighth cranial nerve enter the internal auditory meatus. The nerve takes a rather tortuous course through the dense petro of the temporal bone. Within the canal there is a small ganglion for the sensory fibers. Gustatory, tympanic and salivary branches, and motor fibers to the stapedius muscle are given off within the canal. Soon after the nerve makes its exit from the stylo mastoid foramen it begins to be split up into numerous branches many of which are found imbedded in the parotid gland. At the exit from the canal the nerve is composed essentially of motor fibers which supply most of the muscles of expression of the face including those of the forehead, orbital region, nasal region, superior maxillary region and inferior maxillary region.

Case History: The patient made his first appearance at the Bell Memorial Clinic Dispensary on April 6th, 1920. He states that his age is 46 years, and that he has never been ill before excepting a few attacks of palpitation of the heart. His wife is an asthmatic. She has had one child which lived six days. She has had three miscarriages respectively on the fourth, second and second month of pregnancy. The patient denied syphilis and gonorrhea.

Present History: On March 23rd, 1920, while performing his duties as chauffeur for a wholesale grocery company and while riding on a truck he felt a peculiar sensation of drawing on his chin towards the right. He called his wife's attention to it that evening but she observed nothing unusual in his face. He states that it was a warm day and that he was working in his shirtsleeves. There is no history of trauma. On the following morning shortly after waking up he observed that his mouth was drawn to the left and in washing he thrust his fingers into his right eye. He found some difficulty in speaking. Food collected about his teeth on the right side. He felt a hard tender body the size of a pea just below the right ear. He noticed no impairment of taste. A mild amount of pain was present in his right ear. This pain disappeared in a short time. This

condition has remained unchanged until this visit.

Examination: On being directed to move his eyebrows the patient shows a perfectly smooth right forehead, though the left side is corrugated when the eyebrows are lifted. The right eye lid cannot be closed or opened while the left responds normally. This leaves the cornea subject to bombardment from dust and to drying from exposure to the air which produces lachrymation and often an inflammatory state. On testing facial movements we observed that the right side of the face flattened and the right mouth angle remained immovable while the left mouth is normal. The tongue is protruded mesially but the right mouth angle rests on the tongue border while there is a space between the angle of the mouth and the left margin of the tongue. The right facial nerve is definitely tender to pressure along its course in front of the tragus. A painful lymphatic node is palpable just beneath the right ear. The left cranial nerve is entirely normal. The fifth cranial nerve is normal. The pupils are equal and react well to light and accommodation. There are no palsies of the extrinsic ocular muscles.

The general physical status is good. The deep and superficial reflexes are equal and normal. The Wassermann blood serum test gives a four plus positive.

The patient has been directed to enter the Hospital for a lumbar puncture and cerebrospinal fluid examination. To this he has not consented. He has been given a saturated solution of boric acid to be used as an eye wash. He has also been given sodium salicylate grains five t. i. d.

On April 13th, the patient reappeared for an examination. Movements in the right fronto-palpebral group of muscles is now reappearing. There is no tenderness of the right seventh cranial nerve. The earache has diminished.

Relative to the diagnosis in this case it is very clearly a paralysis of the seventh cranial nerve. It is definitely an involvement of the lower motor neuron in that

no other cranial nerves or other pathways in the brain are involved. Furthermore the emotional fibers are involved equally with the voluntary muscle fibers. Again taste is well preserved. Thus, considering the distribution of the palsies and involvement of fibers supplying the ear we will conclude that the lesion is somewhere between the middle portion of the canal in the petron and the point of exit of the nerve from the canal.

The exact etiology is a more difficult problem to determine. The vast majority of isolated paralyses of one seventh nerve such as is seen in this case come under the typical class of Bell's palsy or as is also designated at times, refrigeration palsy. Many of the patients will come to you with a history of a sudden paralysis of one seventh nerve without much pain following an exposure to a cold draft of air or some other chilling process. By some authorities these are also grouped as a rheumatic state.

This patient has a four plus Wassermann on the blood serum. Accordingly, we cannot rule out syphilis as a possible cause of the disease. Thus, we may have a syphilitic neuritis or a gummatous process in or near the canal and pressing upon the nerves. However, the fact that the patient improved during a period of one week's treatment with sodium salicylate indicates that it belongs to the so-called rheumatic group which in our opinion simply spells some kind of an infection. Thus, our diagnosis would be an interstitial neuritis within the canal. However, we should not neglect the evidence of syphilis. It is extremely important for this patient to submit to a lumbar puncture. A complete careful examination of the spinal fluid is most important.

The course for seventh cranial nerve palsies in general is variable, depending upon the etiology and the degree of involvement of the neural elements. Some recover in a few weeks, and a few never completely. The prognosis for this individual case is good. He should make a complete recovery or almost complete recovery within four to eight months.

Treatment: The following therapy may be recommended for the Bell's type of facial nerve paralysis: As long as there are evidences of acute trouble in the nerves salicylates should be continued. Very soon sodium iodide in three to ten grains doses t. i. d. may be considered. When the inflammatory process subsides strychnia should be given. Massage and electrical treatment after subsidence of the acute process are most valuable. The application of heat in the form of hot packs is valuable in the early stages especially during the first week or ten days.

R

Clinic of Dr. T. G. Orr**LATE RESULTS OF SKULL FRACTURE**

We have for demonstration today a patient showing the late effects of a serious fracture of the skull. This patient was admitted to the Hospital Feb. 17, 1920, with a diagnosis of hemiplegia following a fracture of the skull. He is forty years old and a laborer. Sixteen years ago he was struck on the head with a billiard cue. Immediately following the blow there was loss of the ability to speak and a right hemiplegia. He was not unconscious at the time of the injury or at any later time during the next thirteen years. He was untreated for three days and was then taken to a hospital where he was operated upon at once. According to his statement his "skull was raised". Following the operation he was unable to talk for two weeks after which time he began to recover his speech. At the same time his right arm and leg were slowly recovering. Four weeks after the operation he left the hospital and in seven weeks was back at work. For the following twelve years he was perfectly well. About four years ago he began to have convulsive seizures of the right arm and leg which would last for a few minutes. During these short attacks he was perfectly conscious and able to talk. After the attacks he would continue his work. This condition continued for about a year when suddenly, three years ago, he dropped unconscious in the street. At this

time he was unconscious for about one week. The hemiplegia and speech disturbance again appeared. In the last three years he has frequently had what he calls convulsions which have chiefly been confined to his right arm and leg. He has been unable to do any work in these three years. At present he has some difficulty in walking and a marked disturbance of speech. He has let us know that he knows what he wishes to say but is unable to utter the proper words.

The past history is negative. He denies absolutely any syphilitic infection.

The Wassermann test was negative as were the urinalysis and blood counts.

Dr. Skoog examined the patient and the positive findings of his report are as follows: "The gait is typical of a hemiplegic. There is some voluntary movement of the right hip, knee and ankle but none of the toes. The paralysis is more marked in the arm than in the leg. There is some movement at the shoulder but none at the elbow or wrist. The deep reflexes on the left are slightly increased and tremendously exaggerated on the right. Clonus is well sustained at the patella and ankle. The Babinski is positive but the Oppenheim is questionable. The superficial reflexes are more brisk on the left but present on the right. There is mild palsy of the right seventh nerve which is especially marked by protruding the tongue. The stereognostic sense is defective on the right but normal on the left. The speech is considerably deficient. Many words are extremely difficult. The skull has a marked depression over the left parietal region measuring 4x6 cm. This lies immediately over the leg center, involves the trunk and arm centers and extends slightly anterior to these regions.

The clinical diagnoses were

- (a) old fracture of skull with cranial defect,
- (b) right hemiplegia,
- (c) motor aphasia,
- (d) Jacksonian epilepsy.

The question of treatment was a difficult one to decide in this case. We have ex-

plained to the patient that the prognosis is bad and that improvement by operation is doubtful. We feel, however, that there is some chance that he may be benefitted. We are hopeful that he may, at least, be relieved of the Jacksonian epilepsy. With the patient understanding the situation perfectly we have decided to do an exploratory craniotomy.

We shall now proceed with the operation. The scar of the old operation and the depression in the skull are here evident. The incision is made in the shape of an inverted U over the left Rolandic area including the cranial defect. With the aid of a Devilbis instrument we are now turning down a bone flap. This flap is approximately 3x6 cm. and extends downward from the cranial defect. The dura is next opened. At the site of the old injury this membrane is very much adherent to the brain substance beneath. There is also considerable scarring of the pia-arachnoid. Here are found three small flattened out cyst-like formations. There is nothing to be found over the speech center. The intracranial pressure is not increased and there is no localized pressure from bone. Our positive findings then are marked scarring and thickening of the dura and pia-arachnoid over the upper Rolandic area and the small cyst-like formations in the scar. We have removed these cysts. Since there is no evidence of pressure due to bone the skull flap will be replaced. The dura and fascia are closed with plain gut and the scalp with interrupted silk sutures. A small rubber tube drain is inserted down to the dura. This is to be left in place for 48 hours to drain out oozing blood and serum. The patient has been very little disturbed by the operation which has consumed almost an hour.

This case is very interesting and somewhat unusual, first because the primary injury was severe enough to produce hemiplegia but it did not produce unconsciousness and, second because the paralysis cleared up in a few weeks and the patient lived and worked without discomfort for twelve years and then the paralysis returned. It has not been possible to determine why the paralysis

returned after such a long interval. It was suggested that syphilis might have something to do with it, but he denies lues and the Wassermann is negative. A developing tumor was considered but was not found at operation. I do not believe that the pia-arachnoid cysts could account for the hemiplegia. There was no evidence of hemorrhage. The real cause of the return of the paralysis was not discovered. The scarring of the brain found at operation would appear sufficient to disturb the motor area enough to produce the hemiplegia and epilepsy but why a lapse of twelve years before the scarring began is the problem.

This case should illustrate to you how difficult it is to prognosticate with any degree of accuracy in head injuries. After this man's recovery from the primary injury no one would hardly have suspected any future trouble. In any cranial trauma case one should learn to be very guarded in his prognosis and careful with his treatment. Many injured heads develop symptoms hours, days or even weeks, after the initial trauma. When in doubt about any injury to the brain keep the patient under very close observation. Hardly a year passes that we do not see reports in the city newspapers concerning patients taken to police stations or holdovers for drunkenness and some minor injury that eventually proves to be skull fracture. These reports are often not very flattering to some of our profession. Adopt the sure plan always in these cases and keep them under careful observation until you are sure of their safety.

The late results in skull fractures are extremely important. A knowledge of the remote effects of head trauma is not only of great importance from the standpoint of the patient but may be of great importance to you from a medio-legal standpoint. English in the London Lancet of 1904, reviewed 200 cases of head injuries to determine the ultimate effects of trauma after apparent immediate recovery. Thirty nine per cent showed no effects afterward. Forty six per cent showed slight signs of trouble and fourteen per cent showed marked symptoms that pre-

vented the patients from working. In over ten per cent of the cases there was some mental impairment. Chronic headache, vertigo, vomiting, change of character, aphasia, agraphia, loss of smell, nystagmus, facial paralysis, deafness, glycosuria, hemiplegia, traumatic epilepsy and insanity are some of the more important complications that may result from head trauma.

Note. The patient was seen two months after he left the Hospital. The wound was healed perfectly. There was no perceptible change in the paralysis. He had had no epileptic attacks since the operation.

R

Syphilis of Anterior Horns

G. M. Goodwin, New York (Journal, A., M. A., Feb. 7, 1920), gives the following history of a young Spaniard, suffering from a paralysis of gradual onset without pain, but with symptoms of muscular atrophy fibrillation. There were no bulbar symptoms and sensory discrimination was retained. The picture generally seemed to correspond with that of progressive muscular atrophy, though the predominating atrophy in the leg suggested the Charcot-Marie-Tooth type of progressive neutral atrophy. The blood Wassermann reaction was *, while the spinal fluid showed a **** Wassermann reaction, a cell count of 80 with 92 lymphocytes in the smear, a positive globulin reaction, and a colloidal gold curve of the taboparetic type. It was evident that the patient was suffering from syphilis in spite of his denial, and that the anterior horns were especially affected. This has been a very rare type in Goodwin's experience. A further report after longer observation, is promised.

R

Spirochaeta Pallida

The effect of weak acetic acid on spirochaeta pallida has been observed by Herman Goodman, New York (Journal A. M. A., March 20, 1920). When using the solution to hemolize blood in the attempt to remove the spirochaete, the organisms were much changed, had lost their coil and were immobile. The author came to the belief that it was unable to live in an acid environment and that such might be of use in the prophylaxis of syphilis. He intends to carry on the investigations on animals, and to determine whether the acetic acid penetrates more deeply into tissue such as the mucosa than the others.

**THE JOURNAL
of the
Kansas Medical Society**

W. E. McVEY, M.D. - - Editor

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Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

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Critical Situation of the Medical School

By the time this number of the Journal is in the hands of its readers something of definite importance to the future of the medical school will have been determined.

The last legislature appropriated \$200,000 for the erection of a new hospital building at Rosedale, but a condition was imposed that a suitable site for the building should be furnished free to the state. It may be a wise policy to so retard or jeopardize the beneficent purposes of legislative acts, but an ordinary doctor finds it hard to appreciate the wisdom or understand the policy.

Considerable time has elapsed since the appropriation was made and up to the present the proper site has not been secured. It was the original idea, we understand, to purchase property adjoining that now occupied by the school and Bell Memorial Hospital, but this plan seems to have been blocked in some way, probably by the exorbitant prices asked for that particular ground.

The Committee appointed by the Governor to find a suitable site has finally agreed to accept a tract consisting of twelve acres on Twenty-ninth Street, in Rosedale, and according to a letter received from the Dean of the Medical School the prospects are much brighter than for several months past. We quote the following from this letter:

"The medical school has at last reached a place where a decision will be reached in regard to the hospital for which \$200,000 was appropriated at the last legislature, which is to be spent conditionally upon an appropriate site being furnished the state free of charge. The Committee has finally settled upon a tract of land on Thirty-ninth Street in Rosedale, containing over twelve acres, beautifully located upon the Roanoke car line and the Thirty-ninth Street car line, and within a few blocks of the Olathe car line. This site must be obtained by June 16. The city of Rosedale has called a bond election for June 15, which will presumably raise \$34,000 towards the amount required to purchase this tract, though there is opposition to it by interested parties. This leaves \$31,000 to be raised by the efforts of the school. This decision was reached on May 26 and by May 28, \$12,000 of this amount had been pledged to be paid by June 10. Some subscriptions are being made, based on four payments six months apart.

The situation in regard to the medical school had become desperate until this decision of the Committee; and this together with the effort of the citizens of Rosedale has given every one new hope.

The Alumni Association under Dr. Francisco's leadership has also plunged into the campaign in an effort to push the campaign and meet the demands of the Committee.

It is believed that this new site away from the railroad tracks, and well located in every way will give a new impetus to the growth of the institution and remove the liability to opposition from legislative committees; and the school will rapidly forge ahead to take its place with other institutions of its kind, as in Iowa, Nebraska, Oklahoma, Michigan and Minnesota.

The faculty, in the meanwhile, wishes to express its appreciation for the support it has received from the profession of the state and wishes to appeal for still more support; because it has realized that it is impossible for the institution to fulfill its obligations and opportunities without the complete co-operation of the profession throughout the state. It is hoped by the faculty of the Medical School that in the future the Committee appointed by the State Society will take an active interest in suggestions as to the method of bringing about this close co-operation."

—R—

A Feature of the Banquet

We are exceedingly glad to be able to reproduce herewith two poems which were

read by Dr. J. R. Scott at the Banquet given the members of the State Society at Hutchinson. This contribution to the entertainment feature of the banquet was deservedly appreciated by those present and we regret our inability to publish these verses in the last number of the Journal.

THE ARMY MEDIC

The civilian medic to the army came in droves,
Came in droves,
From the cities, from the hamlets and the coves,
Yes, from coves.
They came to old Fort Riley,
And each was laughing slyly,
So green were they and clad,
These new men in olive drab,
That they though each other "punk",
And nothing more.

The Kansas Medic in the army was a joke,
Just a joke,
Thus the majors east of Pittsburg thought and
spoke,
They often spoke.
They have hayseed in their hair,
They are wild and woolly. Bare
Are they of any knowledge,
Ever gleaned in a college,
They are "dubs", only "dubs",
And nothing more.

But these "dubs" were up to something all the
time,
All the time.
Though they in eastern lingo did not shine,
They did not shine.
Eastern majors down the line,
Presently were marking time.
Kansans working with a laugh,
Smiling as they took the gaff,
They were lieuts, only lieuts,
And nothing more.

Soon the bubble we had punctured, "don't you
know",
"Don't you know",
For these eastern army fellows, were not slow,
They were not slow.
And we found them not half bad,
Though at times they made us sad,
With their swagger and their strut,
They were "kinder uppish", but
They were men, all were men,
And nothing more.

KANSAS

Four hundred miles of wind swept plain,
That's Kansas.
Four hundred miles of grass and soil
Whose sun kissed fields requite our toil,
With golden grain and waving corn,
That's Kansas.

A state where equal rights obtain,
That's Kansas.
A state where woman speaks her mind,
Yet gentle, winsome, loving, kind,
In ev'ry grace and virtue trained,
That's Kansas.

What state is foremost in the van?
It's Kansas.
For health, for wealth, for civic pride
To find her equal long will ride
The pilgrim seeking for a home.
Yes, Kansas.

A state from out the desert wrought,
That's Kansas.
Reclaimed by men no toil could bar,
And though her children travel far,
She grips the heart and holds. It's home
In Kansas.

R

Improvement in Hospital Service

Every state medical association in the United States has its part in the present universal movement for the betterment of hospital service. Every association now has its own committee which is studying the hospital situation in its state in co-operation with the Council on Medical Education of the American Medical Association. The Council has obtained, through reports, correspondence, and other methods, data relative to all hospitals in the country and each state committee has been supplied with the data relating to the institutions in its state. Through their closer familiarity with the hospitals, or by inspections the state committee is in excellent position to verify these data and to make a reliable report to their state association and to the Council.

For convenience and in order to secure uniformity of reports from the forty-eight committees regarding the relative efficiency of hospitals, blanks furnished by the Council call for a rating of all hospitals in classes A, B and C, grouped also according to the special class of patients cared for. This rating is not for publication but will aid the Council in the preparation of a list of hospitals which are considered worthy of approval. These lists are subject to frequent revision so that names of other hospitals can be included as soon as sufficient improvements are made to warrant their being approved. State committees are urged to promptly report to the Council any instances where such improvements have been made.

The purpose of the work is to aid the hospitals in providing for their patients the best possible service and in no way to

injure those which are honestly endeavoring to provide such service. Toward this end, every possible assistance will be given to individual hospitals by the Council or by the local state committee in establishing such changes as will make them worthy of approval.

Forty-two state committees have reported progress in connection with the latest survey and thirty-four have turned in reports regarding hospitals inspected and graded, which have more than half the entire bed capacity of all general hospitals in the country. Meanwhile, this work of the Council is not conflicting with, or duplicating the splendid work being done by the American College of Surgeons, the Catholic Hospital Association, the American Hospital Association or other agencies. In fact the work of each agency is evidently complementing that of the others.

At the New Orleans meeting recently the House of Delegates of the American Medical Association registered an intense interest in the improvement of hospital service and authorized the trustees to generously provide for that work. This work has been so intimately related to that of the Council on Medical Education that the name of this Council was changed to the "Council on Medical Education and Hospitals."

In brief, further enlargement of hospital work by the American Medical Association is assured and in this work each state is destined to have an important part. Toward this end each association is urged to make its hospital committee permanent and to retain on it those who will not only be active but who also can do the work in the most efficient and unbiased manner. Hospitals, at present form the closest link between the medical profession and the public and the medical profession should do all it can to aid the hospitals to provide the very best service possible.

B

ETCETERA

Treat the patient first and then the disease.

Functional pathology cannot be seen with the microscope and yet it is there.

There is another New Thought School of Medicine. Its slogan is that the less people wear the longer they live. If that proves to be a fact, how long will the fashionable lady of the present period live?

A medical man connected with Johns Hopkins is said to have discovered and perfected an apparatus by which fresh air can be pumped into the brain. The operations can be performed under local anesthesia. Water on the brain can be let out by gravitation and the vacant space can be filled with air from the pneumatic pumping plant. A cerebrometer will be used to measure the does. Its use will be confined to jawsmiths and pessimists.

Empiricism has fathered the belief, and clinical experience the practice, in combining drugs. The agents combined are generally of the same family. They are supposed to be helpers to the parent drug. Such a mixture or chemical combination is supposed to do what the principal cannot do alone or does too slowly. Synergistic drugs and pluri-glandular therapeutics require more knowledge and greater ability to discriminate in selecting agents for such combinations than mono-therapy. Since forty per cent of diagnoses is wrong and probably as large a per cent of combinations of drugs and serums is wrong, the safety balance shows in favor of the single rather than the multiple therapy for the average practitioner, as yet.

Disfunctioning, or incomplete or unnatural functioning of an organ is where the organ has become a bad actor. Neither quantity nor quality of the output being up to requirements. This brings on trouble in the nature of a syndrome. A syndrome is where all the complainants meet and register a kick. The doctor tabulates the complaints, names the cause of the trouble and tries to harmonize the malecontents and get rid of the foreign walking delegates and get the regulars to go back to work. If the various organic functions should, or could, be tested at regular intervals it might be possible to discover the first abnormality and perhaps avert the more serious disturbances that proclaim themselves in syndromic symptomatology.

It seems that the anti-scorbutic body in the vitamine is easily destroyed by heat. The tomato seems to be one of the exceptions and this exception is attributed to the acid in the tomato. Hence canned tomatoes and acid fruits are excellent anti-scorbutics.

The best stump to fit a glass eye on is made by fitting a cartilaginous section of rib in the back of the orbit, drawing the muscles and then the mucous membrane over it. The movement of the artificial eye is practically perfect when fitted over such a stump. The sunken appearance of the soft tissues is avoided and there are no bad after effects.

VARNA, Bulgaria.—Awaiting the arrival of American Red Cross hospital supplies, the three Russian doctors in Varna's one hospital are using flint bone scalpels in treating the sick and wounded from the four thousand refugees in the camp outside the city. The doctors have adopted these stone-age tools because of the lack of modern instruments and because a freshly chipped flint possesses an excellent cutting edge and a perfect immunity from infection. The Varna hospital has but eight surgical instruments which are manufactured as such, and these are too rusty for use.

A large number of seizures and prosecutions on the charge of false and fraudulent labeling of proprietary preparations have been made during the past year than in any other year since the enactment of the Federal Food and Drugs Act, according to a recent statement by officials of the Bureau of Chemistry, United States Department of Agriculture.

A recent report of The London Radium Institute shows that "A person who habitually handles radium or is constantly in contact with radium rays suffers local and systemic effects. After working for a few months with radium apparatus the skin of the fingers becomes roughened and inelastic and tactile sense is diminished, but sensation to heat and cold is exaggerated. Later the skin becomes fissured, small corns or warts develop and the nails become thick and brittle". The report further says that clinical workers are more liable to be affected than laboratory workers. There is exaggerated fatigue and a fall in the number of white blood corpuscles is observed.

Settlement of 127,151 insurance claims, for death and total permanent disability, and representing a total value of \$1,135,552,173.45, is announced by Director R. G. Cholmeley-Jones of the Bureau of War Risk Insurance. Only 5,119 claims are pending, and in these cases the claimants are beneficiaries in many instances residing in foreign countries where disturbed conditions render communication impossible.

Brownfield (Southwest Med.) recommends in the treatment of hay fever the administration of calcium chloride to increase the resistance to anaphylaxis. A teaspoonful of a five per cent solution is given in water three times a day after meals. All nasal defects should be removed and the sinuses carefully investigated. Hay fever affects only the tissues supplied by the sphenopalatine ganglion. If congestion or ulceration is found in the region of the sphenomaxillary fossa the areas are treated with from two to ten per cent solutions of silver nitrate. Cocaine may be applied to the sphenopalatine foramen with good results and should be followed with mild astringents—silvol, cuprol, analine red or quinine urea. If this treatment does not give relief the ganglion may be directly injected with cocaine, novocaine or phenol and alcohol. One to three treatments will usually give relief.

The rapid growth of business in Canada has made it necessary for The Abbott Laboratories to establish its own branch office at 57 Colborne Street, Toronto. The A. M. A. Council-Passed Dakin antiseptics, Chlorazene, and Dichloramine-T are proving immensely popular among Canadian physicians and surgeons, as well as among American Doctors.

Recent reports received from Red Cross workers in Vienna reveal that doctors and surgeons in hospitals there have declared that they cannot live on the present rate of pay, and threaten to go on strike unless their salaries are immediately raised. Their present remuneration is less than that of the lowest day laborer, the Red Cross workers say, and the doctors consider that they should have pay at least equal to that of the washerwomen in the same hospitals.

The absence of essential drugs in pharmacies in Vienna combined with the very grave health situation, which has crowded every available inch of space in the hospitals with seriously ill patients, has made the task of the overcrowded medical staffs one almost beyond human endurance. Physicians attached to the American Red Cross relief mission are doing what they can to aid, but the situation is extremely serious.

B

C. & C. Bureau

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take

advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accounts, give the name in full if possible, the occupation if known or can be learned, the correct address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

Present Addresses Wanted for the Following:

Last known address

Baird, Zeb.....	Chetopa, Kansas
Brooks, Joe.....	525 N. Emporia, Wichita, Kansas
Burk, James.....	Western Iron Foundry Chetopa, Kansas
Bush, Frank.....	Chetopa, Kansas
Carlin, J. J.....	Metropolitan Life Ins. Co., Topeka
Cook, H. O.....	Police Dept., Topeka
Crosser, Jasper.....	Iowa
Fromish, W. W.....	1304 N. Water, Wichita
Harrison, G. D.....	Marysville, Kansas
Hart, T. J.....	Redfield, Kansas
Hedrick, Mr.....	1524 Lane St., Topeka, Metropolitan Life Insurance Co.
Johnson, S. S.....	1616 Clay St., Topeka
Lewis, Bert.....	332 N. Washington, Wichita
Morrow, G. W.....	Redfield, Kansas
Penick, Frank.....	1200 S. Emporia, Wichita
Reed, W. Ernest.....	1055 N. Main St., Wichita % Colman Lamp Co.
Rogers, A. J.....	250 N. Emporia, Wichita
Schmidt, Wm.....	551 E. Gordon St., Topeka
Seymour, Ray.....	1600 E. 8th St., Kansas City, Mo.
Sondergard, H. O.....	Metropolitan life Insurance Co., Topeka
Whitten, C. C., Carpenter.....	Kansas City, Mo. Formerly—Wichita, Kansas
Wilson, U. G.....	424 Paramour Ave., Topeka

R

Stormont Medical Library

The Stormont Medical Library is maintained as a department of the Kansas State Library. Members of the Kansas Medical Society have the privilege of withdrawing books from any department of the library for periods of ten days each. Where books are delivered at library expense, it is expected that those withdrawing the books will reimburse the library for such expenditure. Books will be forwarded to any part of the state.

The Stormont Medical Library is maintained primarily for the members of the Kansas Medical Society. Write the librarian immediately for the book you need most.

If you do not know the author of the book, give the title. If you do not know either, just tell the librarian the subject that you are especially interested in, and he will send you the latest book on the shelves on that subject. Do not procrastinate. Write right now.

The following books have been added to the Library:

The American Encyclopedia of Ophthalmology,
Vol. 16.

Regulation of the Practice of Medicine (American Medical Association) 1915 ed.

Frederick Tice's Practice of Medicine, 1920 ed.,

R

Proceedings of the Fifty-Fourth Annual Meeting of the Kansas Medical Society, Held at Hutchinson, Kansas, May 5th and 6th, 1920

Meeting of the Council

The Council of the Kansas Medical Society met in the alcove of the Chamber of Commerce, May 5th, 1920, at 9:00 A. M. Those present were: the President, Dr. Elmer E. Liggett, Secretary Dr. J. F. Hassig, Councilors Dr. C. C. Goddard, Dr. P. S. Mitchell, Dr. H. N. Moses, Dr. D. R. Stoner and Dr. Wm. F. Fee. There being no business to transact, a motion was made to adjourn to meet at the call of the President.

Meeting of the House of Delegates

The meeting was called to order by the President, Dr. Elmer E. Liggett at 5:00 P. M., in the Board of Trade Room, Chamber of Commerce. On motion of the House the reading of the minutes of the last meeting was dispensed with. Next in order of business was the reading of the reports of the Secretary, Treasurer, Board of Defense Chairman; and on motion the Councilors were permitted to hand or mail their reports to the Secretary. Reports of the various standing Committees were then asked for, and the only one to report was Dr. Geo. M. Gray, Chairman of Committee on Hospital Survey, whose report was read by the Secretary, Dr. J. F. Hassig and placed on file. There were no reports from special Committees, Committee on Arrangements or unfinished business.

Under the head of new business, Dr. McVey was asked to explain the benefits to be derived from the Collection Bureau which is being established and the Medical Directory of the Kansas Medical Society. He also explained about the Stormont Hospital Medical Library.

Secretary's Report

To the House of Delegates:

I desire to make the following report for the year ending May 4th, 1920:

Financial Report

Balance on hand May 4th, 1919, divided as follows:

Medical Defense	\$2890.65
General Fund	6854.34
Total	\$9744.99

Amount received from all sources for year ending May 4th, 1920.

Dues from members	\$5207.00
Received from Editor	687.10
Total amount received	\$5894.10

Total	\$15639.09
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Amount paid out for year ending May 4th, 1920:

Medical Defense	\$1245.51
General Fund	3444.02
Total Expenditures	\$4689.53

Balance on hand May 4th, 1920	\$10949.56
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Statement of how the two funds now stand:

Medical Defense	\$3609.84
General Fund	7339.72
Total	\$10949.56

Plus Interest on Liberty Loans	182.40
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Total	\$11131.96
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Three years ago I was elected Secretary of your Society, but strange to say this is the first time I have been able to attend the annual meeting in that capacity; for shortly after my election I offered my services in the U. S. A. Medical Corps and the following February was called to active duty, thus missing the first meeting, and I did not return from overseas until July of last year, missing the second.

Immediately upon my return I took over the work from Dr. Barney, who acted for me during my absence, and I must say I found the work in excellent shape considering the condition that the war had brought about in all county societies (many of them being disorganized and some of them extinct) thus affecting the membership of this Society, which during the entire year of 1919 was 1248, while up to May 1st of this year we have 1260 paid up members and still going strong, and our financial condition is steadily improving. This is highly encouraging and we are confident that by the end of this year we will be on a pre-war basis, and the present indications are that we are going to surpass it. As a means to this end, we urge that the local secretaries bestir themselves to greater activities, using their influence to induce delinquent members to pay up, and invit-

ing all eligible men in their counties to become members.

The A. M. A. offers a plan for increasing the membership of the county societies by sending an organizer into the State, the A. M. A. receiving a dollar for every new member. I have nothing to say against the plan if the State Society sees fit to adopt it, but to me, it hardly seems necessary if the secretaries of the county societies only have the needed "pep" to put the thing over themselves and save the dollar.

They should explain the benefits to be derived from membership in the local and state societies by way of the Medical Defense, a Collection Bureau which is being established, a directory of the members of the Kansas Medical Society which is in course of preparation and the monthly Journal, a first class medical publication, second to none—all of these free with paid up membership; and lastly, their eligibility to the A. M. A.

It has been somewhat difficult this taking over the work of the Society in almost mid-year, having missed the previous annual meetings, added to which was the task of re-establishing my practice after my absence in the service, and I ask your indulgence for my sins of commission, as well as my sins of omission.

I trust that the program will meet with your pleasure and approval and I want to express our gratitude to our worthy president, Dr. Elmer E. Liggett for his able and ever ready assistance, and we also thank the members and guests who have responded so graciously with papers.

And in conclusion I wish to express my appreciation for the confidence and honor you have bestowed upon me.

Respectfully submitted

J. F. Hassig, Secretary.

O. K.:

W. E. McVey,
G. A. Blasdel,
Auditing Committee.

The report was accepted and placed on file.

Treasurer's Report

To the House of Delegates:

I desire to submit the following report for the year ending May 4th, 1920:

Balance on hand May 4th, 1919	\$9744.99
Cash received from your Secretary	\$5894.10
Cash received as Interest ..	182.40
Total amount of cash received from all sources	\$15821.49

Cash paid out to May 4th, 1920:	
Medical Defense	\$ 1245.51
General Fund	3444.02
<hr/>	
Total Expenditures	\$ 4689.53
<hr/>	
Balance on hand May 4th, 1920	11131.96
Of this amount we invested in Liberty Loan:	
Second Issue Liberty Loan ...\$ 3000.00	
Third Issue Liberty Loan ... 1500.00	
Total amount of Liberty Loan	\$ 4500.00
<hr/>	
Cash in bank subject to check	6631.96
L. H. Munn, Treasurer.	

O. K.
G. A. Blasdel,
W. E. McVey,
Auditing Committee.

Report accepted and placed on file.

Editors Report

Council Kansas Medical Society,
Sirs:

Your Editor begs leave to report the financial condition of the Journal for the fiscal year ending May 1, 1920, as follows:

Subscriptions from members (1500)	\$ 3000.00
Subscriptions from non-members	3.50
Received from Advertising ..	3445.25
Received from other sources ..	474.35
<hr/>	6954.10
Publishing Journal	2128.81
Other Printing	145.50
Mailing and Postage	170.00
Salaries, paper & misc. exp...	2388.07
<hr/>	4832.38
Paper stock on hand	2121.72
Acct's due and payable	149.31
<hr/>	239.60
Net earnings for the year	2510.63

And the following statement of the account of the Editor with the Society:

From May 1st, 1919 to May 1st, 1920:	
Received from Treasurer\$ 1500.00	
Received from advertising ... 3446.25	
Received from subscriptions .. 33.50	
Received from other sources 474.35	
Total receipts	\$ 5454.10
<hr/>	
Expended for printing Journal	2128.81
Expended for other printing including Directory and C. & C. Bureau	187.75
Expended for mailing and post- age including Directory and C. & C. Bureau	210.04
Expended for salaries, paper & misc. exp. including Direc- tory and C. & C. Bureau..	2568.07
Total expenditures	\$5094.67

Cash on hand	360.43
Paper stock on hand	149.31
Acct's due and receivable....	239.60
Due from Directory and C. & C. Bureau	262.25
<hr/>	651.16
	\$1011.50

The Directory

According to the authorization given by the Council in January we have made some headway in securing the necessary data for a Directory of the physicians of Kansas. After some investigation we found that such a Directory could be published so as to be sold at a subscription price of \$2.00 and give us a fair margin to pay all the expenses connected with its publication. We have therefore inclosed with each request for information a subscription blank and up to this date out of 379 returns we have received 205 subscriptions. We have made up lists of physicians in each county according to the last A. M. A. Directory. These lists have been sent to the secretaries of county societies for correction. As soon as these have been returned we have sent out slips to the individual physicians. Progress is necessarily slow but we feel that we should endeavor to have a directory that will be accurate.

As the primary object in this effort was to secure a complete card index of the physicians of the state which then could be kept up to date with very little effort, and the publication of a directory incidental to this with the idea that it might possibly pay the expenses of preparing the card index, we submit the proposition for your approval or rejection.

Credit and Collection Bureau

Pursuing the plan proposed to the Council in January we have proceeded to establish a Credit and Collection Bureau. Notices of the plan were published in the Journal and sent to the secretaries. Notices are also mailed with the Directory blanks. Up to this date 124 bills have been sent in for collection. First notices have been sent to each of these debtors, and thirteen have paid their accounts on first notice. Follow up letters will be sent out immediately and we anticipate a considerable response.

Of the 124 first notices sent out 28 were returned undelivered. They had moved from their former locations or the addresses given us were incorrect. We have then 83 accounts that must either pay after further notices or their names will be sent to the Secretary of the Society of the County in which they live and the members of the Society advised that they are delinquent debtors and cash should be demanded for future services.

The Journal has cost the Society \$488.41 for the year or 32 cents per member.

Since January 1 the cost of publication has greatly increased. In February 8 pages

were added with an increase in cost of \$59. March 1st the cost of machine work was advanced from \$1.80 to \$2.40 per hour and the March number cost us \$42.16 more than the February number. In April the place of publication was changed with a saving of \$15.00 per month.

A considerable advance in the price of paper has also added to the cost of publication. On account of the scarcity of paper we have thought best to keep a fair supply ahead and have advanced the money for this purpose. A ton of paper was bought Sept. 1st at a cost of \$242. March 1st another ton was purchased at \$273.31, an advance of \$31.31.

There was a general agreement among the State Journals to raise their advertising rates beginning with January, 1920. However, the final agreement permitted all old advertisers and all those who made contracts prior to January 1st to continue at the card rate until January, 1921. So that our advanced rates did not go into effect except on new contracts beginning after January 1, 1920.

An entire new set of matrices have been ordered and the Journal will appear in a new dress as soon as they are received. We would call your attention to the Bell Memorial Hospital Clinics which have been appearing regularly for the past three months. Arrangements have also been made for the publication each month of the new books received at the Stormont Library. Beginning with the May number there will be a department devoted to the Credit and Collection Bureau in which addresses of lost debtors will be asked and other information given the members concerning the credit business.

Respectfully,
W. E. McVey, Editor.

The report was accepted and placed on file.

Report of the Medical Defense Board

The Medical Defense Board submits the following report covering its expenditures during the past year. A detailed account of its legal activities is contained in the report of its Attorney which is attached hereto, and which is to be considered a part of this report:

Expenditures:

1919	:	:
July 7 th , E. D. McKeever, salary May & June	\$ 100.00	
Aug. 9 th , E. D. McKeever, Exp. & per diem Ark. City..	56.00	
Sept. 13 th , E. D. McKeever, salary July & August	100.00	

Sept. 22 nd , E. D. McKeever Exp. & per diem Manhattan	41.81
Oct. 12 th , E. D. McKeever, Exp. & per diem Iola 2 trips	72.03
Nov. 12 th , E. D. McKeever, sal. Sept. & August.....	100.00
Nov. 12 th , O. P. D. Postage & Supplies	3.00
Nov. 29 th , E. D. McKeever, Exp. & per diem Rochester, Minn.	54.29
Jan. 6 th , E. D. McKeever, salary Nov. & Dec.. Exp. and per diem Albuquerque, N. M.	185.53
Mch. 16 th , E. D. McKeever, salary Feb.	75.00
Mch. 20 th , E. D. McKeever, Exp. & per diem El Dorado...	27.19
April 12 th , E. D. McKeever, sal. March and Exp. & per diem Cleveland	214.76
Apr. 29 th , Journal Kansas Med. Soc. Adv.	65.00
Adv.	65.00
Feb. 5 th , E. D. McKeever, salary Jan.	75.00
	1245.51

As Mr. McKeever's report will show, the work of the Board has been very successful during the past year. While new cases are constantly appearing, we have not lost a single one, but have given the knockout to nearly every one that has come to trial.

At the meeting of the Council in January, on the recommendation of the Board, Mr. McKeever's compensation was deservedly increased. He now receives a salary of \$75.00 per month and a per diem allowance of \$20.00 and expenses when engaged in a suit.

Respectfully submitted,
O. P. Davis, Chairman.
D. R. Stoner.

Mr. Edwin D. McKeever, Attorney Defense Board, submitted the following report:

For the year closing I am pleased to state that our report is an excellent one and that no verdicts have been obtained against any member of our society during the year. On the other hand, a number of cases have been disposed of favorable to us.

Brandenburg vs. Colt, Riley County.

The above case was taken from the jury by Judge Smith upon a demurrer to the evidence and judgment rendered in favor of Dr. Colt. There has been no appeal.

Shaffer vs. Brown, Mitchell County.

Dr. Brown died in military service and this case was thereby ended.

James vs. Chaney, Montgomery County. This case was tried and the case taken

from the jury by the Court upon a demur-
rer to the evidence.

Roberts vs. Clopper, Wyandotte County.

This case seems to have died on the docket. Sometime ago the attorney for the plaintiff asked Dr. Clopper to pay his attorney's fees and he would drop it which Dr. Clopper refused to do.

Marriage vs. Hall and Gage, Reno County.

This case was taken I understand from the jury upon a demur-
rer to the evidence and judgment entered for the doctors. I kept in touch with this case but was not called upon to participate in the trial. I do not know who tried it, but the result appears to be entirely satisfactory.

Heck vs. Mowery and Neptune, Saline County.

This case was settled without any judgment against the doctors and I think that the costs were divided. I was just ready to leave for Salina to try the case, when I was notified by telephone that it had been settled to the satisfaction of the defendants. I took depositions in this case at Rochester, Minnesota, and Albuquerque, New Mexico, and am satisfied that if the case could have been tried, it could have been easily defeated.

Rainey vs. Nevitt and Smith, Allen County.

This case was taken from the jury upon a demur-
rer to the evidence and a judgment entered for the doctors. The case has been appealed to the Supreme Court, but I think there is no chance for a reversal.

Adler vs. Regier, Butler County.

This case was taken from the jury upon a demur-
rer to the evidence and a judgment entered for the doctor.

Johnson vs. Allen, Allen County.

This case was tried twice. At the first trial, in which I did not participate, there was no recovery against the doctor, and no recovery on Dr. Allen's counterclaim for his fees. The court gave a new trial which resulted in favor of the doctor. I was at Iola waiting to try the case of Rainey vs. Nevitt and Smith at the time this case, Johnson vs. Smith was tried. I was not called upon to assist and did not volunteer my services. The case, however, was well handled by Mr. Oyler of Iola, Kansas.

Stewart vs. McGuire, Wilson County.

As I was leaving for Fredonia to try this case, I received a telegram that it had been settled. I had been advised a few days before that they were negotiating a settlement, to which I earnestly objected, although I conceded that Dr. McGuire could settle the case if he wanted to. I am not

advised what amount he paid the plaintiff, but I think that it was not much. In my opinion, the money paid in settlement of this case was thrown away as this case could have been defeated. However, if a doctor wants to settle over my objection, it is his privilege to do so, although my experience has proved that it is usually unnecessary.

Tarr vs. Aldrich, Montgomery County.

In this case we filed a motion to make more definite and certain. This motion was sustained and the plaintiff given twenty days to amend. He failed to amend and the court dismissed it which probably ended it.

Paulich vs. Nipple, Coffey County.

I think that this case was tried in the District Court of Crawford County before my last report. At the time of the trial the Court sustained a demur-
rer to the evidence and took it from the jury.

About two weeks after, without any notice or opportunity to be heard, a motion for a new trial was sustained and the judgment of the Court set aside. I then appealed to the Supreme Court from the order of Judge Curran granting a new trial. Upon this appeal the Supreme Court reversed Judge Curran and held that he was right when he sustained the demur-
rer to the evidence and directed the court below to enter judgment in favor of Dr. Nipple. This was not only a great victory for Dr. Nipple for himself, but the Supreme Court wrote an opinion which is invaluable to us, and has been of great assistance to me in the trial of these cases since. In this case which is reported in the 104th Kansas, 801, the Supreme Court has made it very clear that no doctor can be held for damages unless there is a real case against him and proper expert testimony is produced.

Cases have been appearing at about the usual rate since my last report and there are about the usual number pending. I want again to remind the members of the Society that they owe a duty to each other in the matter of this litigation. The great majority of these cases are wholly without merit and many of them would not be brought if the members of the medical profession were not so willing to testify against each other. I have found a number of cases which have been brought at the suggestion of another doctor, and wholly without reason, except perhaps, to satisfy a private grudge against the doctor. As I have said before it is not the lawyer's fault if he brings suit against the doctor when his suit is based upon the statements of an-

other doctor, that the treatment has been careless or not skillful.

You will pardon me if I point with pride to the fact that in the six years I have been attorney for this Board, no member of this association has ever had returned against him a judgment for malpractice and not a cent has ever been paid on account of any claim of damages for malpractice except in a few isolated cases, where a doctor has settled for a small sum over my objection. About 98 per cent of these cases have been tried by me in my own way. This is no reflection upon the local attorney who has been employed by the doctor, because in many cases able attorneys have been employed. Those who have been employed have invariably paid me the compliment of turning practically the entire defense over to me, and have also been of great assistance in selecting the jury, and making valuable suggestions. In each case, as the members well know, the doctor has to pay the local attorney's fee, which would have paid for protection in our indemnity association from ten or fifteen years. Inasmuch as I have been loyal to this society for the past six years, for which, in view of the high cost of living I have never received adequate compensation, the Society will pardon me if I again call attention to the Physicians' Indemnity Association, for which I am attorney, which is now in a flourishing condition, with a good surplus, and available to all members of the State Medical Society for an annual premium of \$12.50. I unhesitatingly invite the members of the Society to join this Association, and promise that each case will be given my personal attention and that I will be present at the trial.

Thanking the whole Medical Profession for the confidence it has so generously given me, I beg to remain your faithful servant.

Yours very truly,
Edwin D. McKeever.

Report on Stormont Library

Dr. W. E. McVey, 612 Kansas Ave., Topeka, Kansas.

Dear Sir: Some time ago I promised to furnish you with some data in regard to the Stormont Medical Library, to be used by the President of the Kansas Medical Society in preparing his annual report to the society. The data should have gone forward some time ago, and I trust that it is not even now too late for it to serve its purpose.

The number of books in the Stormont Medical Library on the 30th of April, 1920, was 4327 bound volumes and quite a num-

ber of pamphlets. During the year ending April 30, 1920, approximately 225 bound volumes and some pamphlets were added to the library. Of this number some fifty per cent were purchased from what has been known as the Sheldon Memorial Library Fund. Some books and magazines, the exact number of which I am unable to ascertain from our records, were donated to the Stormont Medical Library by Dr. C. F. Menninger and his son, Dr. Karl Menninger. I would suggest that you get a statement from one of them in regard to their donation.

In regard to the Stormont Library Interest Fund, I find the following resources:

Balance in fund April 30, 1919	\$330.00
Receipts credited subsequent to April 30,	
1919	260.00
Total amount available for the year.....	590.00

Liabilities:

Expenditures May 1, 1919 to May 30, 1920..	\$313.00
Accounts due and unpaid May 1, 1920	25.00
Books ordered but not received to May 1,	
1920	125.00

Total\$463.00

Balance May 1, 1920

The books in the Stormont Medical Library are loaned to the members of the society anywhere in this state, the only requirement being that the doctor borrowing the books return the same at the end of a period of two weeks or make a request for extension of time on the loan, and also that he pay transportation charges both ways.

The Sheldon Memorial Library Fund was placed in the hands of D. W. Nellis some five years ago by Mrs. Ann Eliza Sheldon for the purchase of medical books to be placed in the State Library as a memorial to her husband, the late Dr. Silas E. Sheldon. The books, purchased with this fund, are shelved along with the books in the Stormont Medical Library, but each one bears a book plate setting forth the information given above. As far as I am able to ascertain, the sum of \$864.24 has during the past five years been paid out of the Sheldon fund for books that are shelved along with the Stormont books. Several books have been ordered and not yet received, the cost of which will be paid out of the Sheldon fund. As the new medical books are received they are catalogued and placed on the shelves in the medical department. As you know, the medical catalog is kept in that part of the library devoted to medical books.

The library is open on week days from 8:30 A. M. until 5:00 P. M. The members

of the society, as you well know, have the privilege of consulting the books personally at any time during these hours.

Hereafter I will endeavor to furnish you with a list of the current additions to the medical library, as I have done the past two months.

If there is any further information, that you would like to have along this line, please communicate with me either by letter or over the phone.

Very truly yours,
H. V. Clayton,
Asst. State Librarian.

Councilor's Reports

Dr. L. W. Shannon, Councilor First District, submitted the following report: As Councilor of the First District I beg to submit the following report for the year ending May 1st, 1920: Although I have not visited the different societies of my district personally, I am informed by their secretaries that each county has an organization and that they are as active as the ordinary county societies of the State. A quarterly meeting is the rule. So far as I have been able to ascertain peace and harmony prevails throughout the district in a general way, with possibly a few personal exceptions to the statement.

At the suggestion of Dr. E. E. Liggett to make an appeal to get new members into the society and reinstate old ones, I put on a campaign by addressing a letter to each county secretary of my district and asked for a report from the members of good standing and a list of names of those of the profession in their county who were not members and eligible. The secretary in each instance responded to my request and I then sent a letter to each delinquent or non-member and asked the secretary to do the same inviting them to join the society. In most instances the application was received. At a mass meeting at Hiawatha, Kansas, in which I was asked to make an address upon the subject, "Public Health", I took advantage of the occasion and introduced and discussed the subject of Medical Education, making an appeal for a common standard of requirements for all applicants who wished to practice the art of health.

Respectfully submitted,
L. W. Shannon.

Dr. C. C. Goddard, Councilor Second District submitted the following report: I have the honor to report that for the past year the 2nd district has been in fairly good shape; the different counties composing dis-

trict are alive and in good shape. I have visited Wyandotte and Leavenworth and found them alive and with paid up membership; the smaller counties have maintained meetings more or less often during the year and have no complaint of any troubles or misunderstandings.

Respectfully,
C. C. Goddard, Councilor.

Dr. P. S. Mitchell, Councilor Third District gave the following report:

To the Council Kansas Medical Society and House of Delegates: I hereby make report for the third Councilor District. All the counties except Elk and Chautauqua are organized and in good working order. Bourbon claims 100% organized while the others maintain about the usual ratio. I have written to men in Elk and Chautauqua with no reply and up to date have not decided to create the expense of going personally, but am waiting for some opportunity when business may call me there or near. I find in all counties, notwithstanding a good organization—a lack of spirit to attend in numbers. Have suggested many things which so far have gained but little.

P. S. Mitchell,
Councilor.

Dr. W. F. Sawhill, Councilor Seventh District, gave the following report:

In making up my report for the year in the 7th District I will state first that the society added two good counties to my district, Clay and Washington; and it is certainly satisfactory to report that every available man but one in Clay County is a member of the county society. The secretary of Clay County wrote that man and I wrote him, and if no response comes we are disappointed. Washington County reports that during the war their secretary entered the service and the society failed to keep up, but now with Dr. H. D. Smith President and Dr. W. M. Earnest, Secretary, they hope to get the county organization in good shape again. In Cloud County all available men but three or four are members and paid up for 1920. One meeting was held and arrangement for others, but bad weather caused postponement. We hope to have some good meetings soon. Mitchell County reported that they were collecting their dues and that they would line up a number of their physicians. I wrote to each of the other counties but received no answers. This spring about the time the county officers expected to call meetings and collect the annual dues the roads became bad and inter-

ferred much in getting things in shape, so that your councilor is not able to make very complete report, but hopes things will shape up better for next year.

Respectfully,
W. F. Sawhill.

Dr. E. S. Edgerton, Councilor Sixth District, submitted the following report:

The past year has been a very good one for this district. By the redistricting of the State in 1919 we had assigned to us the following new counties: Butler, Greenwood, Clark and Comanche.

None of these Counties has a County Medical Society. In all of them now a movement has been started to organize a society, and by the next annual meeting we will introduce to the State Society several new members. In response to an appeal from President E. E. Liggett, an effort was made by each chartered society of the district to increase the membership. All now show a nice gain with Sedgwick County leading with a splendid total of forty-six new members.

Respectfully submitted,
E. S. Edgerton.

Dr. H. N. Moses, Councilor Ninth District, gave the following report:

During the past year the county of Dickinson has been added to this district making one more active medical society. The Saline County Medical Society has been active with meetings each month, a varied program and meetings held at Salina. Effort will be made to hold meetings in neighboring towns. The members of the profession in Ottawa County hold their membership in this Society. Lincoln County Society is less active. It is possible that greater activities may be elicited from the profession of that county if the memberships were in an adjoining county society. The Central Kansas Medical Society is active. Quarterly meetings are held. The Dickinson County Society held four meetings, these being held quarterly. The membership of each society is about in normal standing. Efforts are being made to obtain all members of the profession.

Respectfully submitted,
H. N. Moses.

Dr. O. P. Davis submitted the following report:

The Fourth District is in fairly effective working condition. In the process of redistricting, Pottawatomie, Riley, Dickinson and Clay Counties were taken out of this district, and Osage and Chase were assigned in their stead.

There are two excellently organized county units now doing business in this district, viz., Shawnee, which is now the largest county society in the state, with 119 members, and Lyon, with 26 members. By authority of the Council, Shawnee has absorbed the membership of Osage and Wabaunsee Counties, thus enlarging its membership and giving the two other counties mentioned a strong connection. Lyon has in similar manner absorbed Chase and Morris counties.

I recently visited Lyon County and found every indication of a live and numerically strong organization.

Geary County has an organization but I understand does not hold regular meetings.

Shawnee County, with its strong membership, is now better able than ever to carry on the real functions of a medical society. The highest talent from the large medical centers is frequently brought into the programs. Moreover, the Society is able to make itself powerfully felt in civic affairs on occasion.

O. P. Davis,
Councilor for the Fourth District.

Dr. C. S. Kenney submitted the following report:

To the Officers and members of the Kansas State Medical Society: Two good societies are maintained in the 9th Councilor District—Smith County has one that is in a good condition and cares for the Society work in the East end of the District. The Decatur-Norton County comprising both Norton and Decatur Counties is also thriving and is the nucleus of Medical Society activities in the West end of the District.

We have no cause to be discouraged with the Societies in this part of the State, although it was rather difficult to keep the "home fires burning" in the various societies during the World's War. During the last year there was still some difficulty in getting the proper interest, but now everything looks better and the prospects of a very active and interesting year are indeed good.

Thomas and Sherman Counties have been added to this district, which now comprises Smith, Phillips, Norton, Decatur, Rawlins, Cheyenne, Thomas, and Sherman Counties.

C. S. Kenney,
Councilor 9th District.

Dr. D. R. Stoner, Councilor Tenth District, reported as follows:

The 10th Councilor District includes the counties of Russell, Ellis, Trego, Gove, Wallace, Sheridan and Graham. No local county

organizations, but two active Medical Societies as follows: The Tri-County Medical Society including the counties of Wallace, Logan, Gove, Trego, Sheridan and Graham. Three meetings have been held the past year, one at Oakley and two at Hays joint meeting with the Central Kansas. President Dr. W. J. Lewis, Colby, Secretary, Dr. C. M. Miller, Oakley. The Central Kansas Medical Society includes the counties of Ellis and Russell and has held regular quarterly meetings the past year, as follows: Two joint meetings with Tri-County at Hays, one at Russell, Wilson and Ellsworth. President, Dr. R. Hawes, Russell, Secretary, Dr. Leo Turgeon, Wilson. A special feature of all meetings held during the year has been to have a physician from outside the District as a special number on the programmes. The last joint meeting of the above societies recently held at Hays included Dentists from the western portion of the Golden Belt Dental Society. Secretaries have been instructed to secure 100% membership for 1920 if possible.

Respectfully Submitted,
D. R. Stoner.

Dr. J. A. Dillon, Councilor 11th District, gave the following report:

To the House of Delegates: I desire to make the following report concerning the 11th Councilor District. At present we have three societies—Barton, Pawnee and the 11th District, the latter consisting of Barton, Pawnee, Edwards, Hodgeman and Rush. The counties of Lane, Scott and Hamilton may possibly be brought into affiliation with the society of the 12th District. We have had more interest manifested in the work of the medical societies during the past year than in any preceding year, and I believe we have the largest percentage of members of any district in the state. (This is said with a distinct rising inflection and a man of Kenney's weight could probably make me take it back). We will be satisfied if we can maintain the present organizations in the district and are not contemplating the formation of any more societies.

Respectfully Submitted,
J. A. Dillon.

Dr. Wm. F. Fee, Councilor Twelfth District submitted the following report:

Gentlemen of the House of Delegates: As Councilor of the 12th District I wish to report, following the spring meeting of 1919 I got the doctors of Meade and Seward Counties together and organized them into the Meade-Seward Counties Medical Society.

Every doctor in these two counties belongs to this society with two exceptions; one in Meade and one in Seward, who were not following the ethical lines and were not considered as proper men for the Society. Following that I tried to organize a society of the following towns which are on the Santa Fe branch running from Dodge City to Moscow: Hugoton, Moscow, Elkhart, Rolla, Satanta, Sublet, Copeland and Montezuma, but as yet have not been able to do so, but feel sure will be able to do it this coming year. I understand that Finney, Kearney and Hamilton Counties have a medical society organized already. Grant and Stanton counties seem to be pretty well isolated from railroad communication, and I will try this summer to get the doctors in those counties to join the society, through some of the other neighboring societies.

Respectfully Submitted,
Wm. F. Fee.

MEETING OF THE HOUSE OF DELEGATES

The House of Delegates convened Thursday, May 6th, 1920, at 8:30 A. M., called to order by the President, Elmer B. Liggett. After roll call the following officers were elected for the ensuing year:

President, Dr. C. Klippel, Hutchinson.
Vice President, Dr. J. R. Scott, Ottawa.
Vice President, Dr. J. L. Everhardy, Leavenworth.

Vice President, Dr. Herbert Randles, White City.

Secretary, Dr. J. F. Hassig, Kansas City.
Treasurer, Dr. L. H. Munn, Topeka.
Delegates to the A. M. A., Dr. W. S. Lindsay, Topeka; Dr. R. J. Morton, Green; Dr. Elmer E. Liggett, Oswego.

The following councilors were elected for three years: Dr. O. P. Davis, Topeka, Fourth District; Dr. G. A. Blasdel, Hutchinson, Fifth District and Dr. D. R. Stoner, Ellis, Tenth District. On motion the election of Councilor from the Ninth district was postponed until next year.

The Standing of the Council is as follows:
First District—Dr. L. W. Shannon, Hiawatha, term expires 1921.

Second District—Dr. C. C. Goddard, Leavenworth, term expires 1921.

Third District—Dr. P. S. Mitchell, Iola, term expires 1922.

Fourth District—Dr. O. P. Davis, Topeka, term expires 1923.

Fifth District—Dr. G. A. Blasdel, Hutchinson, term expires 1923.

Sixth District—Dr. E. S. Edgerton, Wichita, term expires 1922.

Seventh District—Dr. W. F. Sawhill, Concordia, term expires 1921.

Eighth District—Dr. H. N. Moses, Salina, term expires 1921.

Ninth District—Dr. C. S. Kenney, term expires 1920, hold to 1921.

Tenth District,—Dr. D. R. Stoner, Ellis, term expires 1923.

Eleventh District—Dr. J. A. Dillon, Larned, term expires 1921.

Twelfth District—Dr. Wm. F. Fee, Meade, term expires 1922.

Dr. McVey was again asked to explain more fully the benefits to be derived from the Collection Bureau, the Medical Directory of the Kansas Medical Society and the Stormont Hospital Medical Library. His talk was well received. On motion the House of Delegates adjourned.

MEETING OF THE COUNCIL

The meeting was called to order by the newly elected President, Dr. C. Klippel. Those present were the President, Dr. C. Klippel, Secretary J. F. Hassig, Treasurer L. H. Munn, Editor W. E. McVey and Councilors Dr. C. C. Goddard, Dr. P. S. Mitchell, Dr. O. P. Davis, Dr. G. A. Blasdel, Dr. H. N. Moses, Dr. D. R. Stoner, Dr. J. A. Dillon and Dr. W. F. Fee.

Wichita was chosen as the meeting place for next year.

On motion Dr. McVey was made an ex-officio member of the Council.

The following were appointed as the Auditing Committee: Dr. W. E. McVey and Dr. G. A. Blasdel.

Dr. McVey made the financial report of the Kansas Medical Journal; also reported the progress made with the credit and collection bureau and the directory of the Kansas Medical Society. On motion the Editor, Dr. W. E. McVey, was instructed to proceed along the some lines that he was doing in the preparation of the credit and collection bureau and directory of the Kansas Medical Society and report the progress at the mid-winter meeting of the Council.

Council adjourned to meet at the call of the president.

A special meeting of County Secretaries was held on May 6th 2:00 P. M., which was called to order by the President, Dr. Liggett. The following officers and secretaries were present: Dr. Elmer E. Liggett, President, Dr. J. F. Hassig, Secretary Dr. W. E. McVey, Editor of the Journal, Dr. E. W. Reed, Holton, Dr. J. L. Everhardy, Leavenworth, Dr. H. A. Alexander, Topeka, Dr. J. T. Scott, St. John, Dr. H. R. Ross, Sterling, Dr. H. M. Stewart, Hutchinson, Dr. C. C.

Hawke, Winfield, Dr. B. S. Pennington, Hoisington and Dr. S. J. Schwaup, Osborne.

Talks were made by Drs. Liggett, McVey and Hassing as to how delinquent members and eligible doctors could best be induced to become members in good standing. This was a very interesting meeting, and no doubt will do much good.

It was suggested and urged that the meeting of the secretaries be an annual occurrence.

Meeting adjourned.

REGULAR SESSION

May 5th, 1920.

The regular session of Kansas Medical Society convened at the appointed hour to listen to the address of the President, the reading of the various scientific papers on the program and the discussion of same.

The following men of national reputation gave fine talks, which were greatly appreciated and did much to make our program and meeting a success: Dr. Robert T. Morris, New York, Dr. Jno. Osborn Polak, Brooklyn, New York, Mr. Jno G. Bowman, Chicago, Dr. L. H. Burlingham, St. Louis, Mo., Dr. Dean D. Lewis, Chicago and Dr. L. J. Pollock, Chieago.

The program carried out was as follows:

President's Address.....
.....	Dr. Elmer E. Liggett, Oswego
"Tonsillectomies"
.....	Dr. L. B. Spake, Kansas City
"Erythrocythaemia Rubra—Report of Case".....	Dr. W. A. Baker, Leavenworth
"Epilepsy".....	Dr. O. S. Hubbard, Parsons
"Obstetrical Experiences of the Country Physician".....	Dr. O. E. Stevenson, Labette
"Tubercular Peritonitis—with Special Reference to cases involving the Pancreas".....	Dr. R. C. Dugan, Ottawa
"Ulcer of the Stomach and Duodenum".....	Dr. W. D. Storrs, Topeka
"Chorca"....	Dr. Lucena C. Axtell, Newton

Wednesday afternoon

"Proteinosis", Dr. C. R. Loudermilk, Galena
"The Principles of the Fourth Era of Surgery" ..	Dr. Robert T. Morris, New York
"Present Day Operative Procedures in Obstetrics" (Slides).....
.....	Dr. John Osborn Polak, Brooklyn, N. Y.

SYMPOSIUM: "THE DOCTOR AND THE HOSPITAL"

"The Small Hospital".....
.....	Dr. T. A. Jones, Hutchinson
"The Right to Health".....
.....	Mr. Jno. G. Bowman, Chicago
"The Doctor and the Hospital"
....	Dr. L. H. Burlingham, St. Louis, Mo.

- "The Duties of a Full Time Health Officer" (read by Dr. Kilbourne).....
Dr. E. G. Brown, Topeka
 "The Profession and the Public—A Plea for Closer Relationship".....
Dr. H. C. Embry, Hoisington
- Thursday Morning
- "Visceral Syphilis".....
Dr. Howard E. Marshbanks, Pittsburg
 "Surgical Infections of the Kidney".....
Dr. R. W. James, Winfield
 "Psychotherapy" ..Dr. J. H. Cooper, Topeka
 "Episiotomy as a Preventative of Severe Laceration During Delivery".....
Dr. Leslie Leverich, Kansas City
 "Poliomyelitis" ..Dr. E. O. Ebright, Wichita
 "Caesarian Section under Local Anesthesia—Report of Three Cases".....
Dr. W. E. Mowery, Salina
 "Syphilis, the Nervous System and the General Practitioner".....
Dr. Karl Menninger, Topeka
 "Operative Obstetrics".....
Dr. Geo. R. Little, Wichita

Thursday afternoon

- Report of Necrology Committee.....
Dr. Elmer E. Liggett, Chairman
 "Complications of Influenza".....
Dr. L. S. Milne, Kansas City
 "Transfusion," Dr. L. M. Krall, Kansas City
 "Peripheral Nerve Injuries and Their Repair", Dr. Dean D. Lewis and Dr. L. J. Pollock.
 "Gall Bladder Diseases", Dr. H. L. Snyder and Dr. H. H. Jones, Winfield.
 "What not to do in Bone Surgery".....
Dr. H. L. Regier, Kansas City
 J. F. Hassig,
 Secretary.

R

SOCIETIES

Stafford County Society

The Stafford County Medical Society met in St. John at 3:00 P. M., Dr. J. C. Butler presiding. The following members were present: J. C. Butler, W. L. Butler, W. S. Crouch, T. W. Scott, Stafford; M. M. Hart, Macksville; C. S. Adams, L. E. Mock, J. T. Scott, St. John.

The collection department that is being organized as a function of the State Medical Society was discussed and a motion, made by Dr. M. M. Hart of Macksville, that this society heartily approves the plan and pledges its support and patronage was carried unanimously.

Dr. L. E. Mock of St. John read a paper on Chorea Gravidarum with report of a

case. The discussion developed the fact that not another member of the society ever had a case. The author stated that in his search of the literature he was able to find very little. The case report presented some interesting points that may have contributed as causative factors in the terminal condition. Further comment is withheld in as much as the society has requested the secretary to send the paper to the State Journal for publication.

Dr. J. T. Scott, delegate to the State Convention, made a report of the meeting. Among other things he reported that out of a total membership of 14 in the local society 10 attended the State Convention. In other words 70% of the Stafford County membership attended the State Meeting, which we are disposed to claim as a record. Dr. W. S. Crouch of Stafford will present a paper at the June meeting.

J. T. Scott, Sec.
St. John.

Finney County Society

Regular meeting of the Finney County Medical Society held May 25th, 1920. Good attendance and close interest.

Programme:

"Some Studies in the Thyroid System"—Dr. S. Stevens, Garden City, Kan.

"Co-operation of Dentist and Physician"—Dr. W. A. Thompson D. D. S., Garden City, Kan.

"Perineal Lacerations"—Dr. A. R. Knapp, Garden City, Kan.

Meetings are held the last Tuesday in each month. Local dentists are associated in the Society as honorary members. Physicians of neighboring counties where there is no Society are cordially invited to attend and will be informed of the meetings and the programme upon request.

R. M. Troup, Sec.

Franklin County Society

Franklin County Medical Society held its regular monthly meeting on Wednesday evening, May 26. In spite of other attractions there was a very good attendance.

Dr. V. E. Lawrence presented a case of aneurysm of the aorta with very great enlargement of the heart.

The paper of the evening was by Dr. J. R. Scott on the subject: "Obstruction of the Upper Air Passages." The paper was listened to with much interest and brought out a very lively discussion.

C. W. Hardy, Secretary,

BOOKS**Surgical Shock and the Shockless Operation Through Anoci-Association**

by George W. Crile, M. D., Professor of Surgery, School of Medicine, Western Reserve University, Cleveland; and William E. Lower, M. D., Associate Professor of Genito-Urinary Surgery School of Medicine, Western Reserve University, Cleveland. Second Edition of "Anoci-Association", Thoroughly Revised and Rewritten. Octavo of 272 pages with 75 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$5.00 net.

The second edition of "Anoci-Association", has the advantage of several years of practical observation and experience in determining the reliability of the principles laid down in the first edition. The authors say: "Accumulating experience in the civilian clinic and in field and base hospitals in France has added so much corroborative evidence of the soundness of the fundamental principles of anoci-association and of its practical application, that we have ventured to rewrite and augment our former volume."

Whether one accepts the principles of anoci-association or not, he is not fully equipped until he has made a careful study of the subject as presented in this volume.

Sexual Impotence

by Victor G. Vecki, M. D., San Francisco, California. Sixth Edition. 12mo of 424 pages. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$3.00 net.

The sixth edition of Sexual Impotence by Vecki has been received. It is a very complete discussion of the subject. It will afford much enlightenment to most readers for there are many conditions which come within the scope of the subject which is handled by the author with a clear perception. He is very matter-of-fact, very definite and therefore conservative. He has given a much greater latitude in his interpretation of impotence than is usual. Every deviation from the ideal condition of virility he considers at least a starting point of impotence. "When virility is in full vigor the sight, the slightest touch, the first embrace of the desired woman does cause sexual desire and the erecting necessary to the performance of the act".

Medical Clinics of North America

Volume III, Number 5 (Philadelphia Number, March 1920.) By Philadelphia Internists. Octavo of 325 pages with 26 illustrations. Philadelphia and London: 1920. Issued serially, one volume every other month. Paper \$12.00; Cloth \$16.00 net. Consisting of six numbers per clinic year.

The March number of the Clinics, the Philadelphia number, is distinguished by a series of clinical reports from the Jefferson Medical College and Hospital. These are: Low

Blood-Pressure by McCrae; Malignant Diseases of the Lung by Funk; Diseases of Gall-bladder and Duets by Rehfuss; Diagnosis of Cholecystitis and Cholelithiasis by Lyon; Chronic Valvular Heart Disease by Beardsley; Ethics, Ideals and Efficiency in the Practice of Medicine by Beardsley; Diabetes Mellitus in Children by Mohler. There are also several clinics from the University Hospital, from the Pennsylvania Hospital and Polyclinic Hospital.

Arteriosclerosis and Hypertension With Chapters on Blood-Pressure

by Louis M. Warfield, A. B., M. D., F. A. C. P., formerly Professor of Clinical Medicine, Marquette University Medical School; Chief Physician to Milwaukee County Hospital, Etc., Third Edition. Published by E. V. Mosby Company, St. Louis. Price \$4.00.

From the amount of material appearing in the medical journals during the past few years on the subject of arteriosclerosis and blood pressure one might expect a recent edition of a book on this subject to contain a great amount of new material. One must agree with the author however that a large amount of the discussion has been speculative. There has been some careful experimentation but the results have not been revolutionizing. The author has included all of the facts which have been determined and has presented the most plausible theories with such evidence as may be considered of importance in their support.

Pasteur—The History of a Mind

by Emile Duclaux, Late Member of the Institute of France, Professor at the Sorbonne and Director of the Pasteur Institute. Translated and edited by Erwin F. Smith and Florence Hedges, Pathologists of the U. S. Department of Agriculture, Octavo of 363 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1920. Cloth \$5.00 net.

This book is much more than its name implies. "It is a contribution to the biological history of a swiftly changing time, a very striking period in the development of science."

This book was published in 1896 but has only recently been translated and an edition published in English. The time elapsed since its first publication has detracted nothing from its merit, nor from the interest which every student and teacher of biology should have in it. In this book much of Pasteur's work and particularly his methods of work, his lines of reasoning and the persistence with which he sought the truth, are carefully portrayed. The fact that Duclaux, who was intimately associated with Pasteur in his work, is the author of the book is in itself sufficient to attract the student in biology.

Diseases of the Chest and the Principles of Physical Diagnosis

by George W. Norris, M. D., Assistant Professor of Medicine in the University of Pennsylvania, and Henry R. M. Landis, M. D., Assistant Professor of Medicine in the University of Pennsylvania, with a chapter on Electrocardiograph in Heart Diseases, by Edward Krumbhaar, Ph. D., M. D., Assistant Professor of Research Medicine in the University of Pennsylvania. Second Edition, Thoroughly Revised. Octavo volume of 844 pages with 433 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth \$8.00 net.

A copy of the second edition of Norris and Landis has just been received. Its practical value has been readily admitted by the profession and the first edition exhausted within a period of two years.

Some additional facts concerning the pathology of the heart and lungs have been determined during the time that has elapsed since the first edition was published and these have been included. The authors have added descriptions of several conditions not included in the first edition. Among these will be found Spirochetal Bronchitis, Influenza, Streptococcus Empyema, Chronic Inflammations of the Lungs of Uncertain Etiology, Calcification of the Lungs, and Pneumopericardium. The work is well illustrated and many plates from frozen sections give valuable aid to the descriptions of various pathologic conditions.

A Text-Book of Physiology, for Students and Practitioners of Medicine

by Russell Burton-Opitz, M. D., Ph. D., Associate Professor of Physiology, Columbia University, New York City. Octavo Volume of 1185 pages with 538 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$7.00 net.

A new and up to date text book on Physiology should certainly be welcomed. Every conscientious student of medicine realizes the constantly growing importance of physiology. The author expresses his appreciation of this fact in saying that "the sole hope of modern medicine is physiology, or in a larger sense, the experimental science."

It is impossible to give a detailed description of this book. However, it is sufficient to say that it is a very complete text book on the subject, is in every particular up to date, and presents in a most lucid manner the physiologic facts most essential to the knowledge of a progressive student of medicine.

R

Influenza and Tuberculosis

Amberson and Burns supplement a previous communication on epidemic influenza among patients and employees of the Loomis Sanatorium, Loomis, New York, with a fur-

ther analysis of the histories of patients who had influenza before entering the sanatorium and a record of the incidence and fatality of this disease among former patients. They also give a critical review of recent literature on the subject.

Of the 1227 traced former patients, 70 contracted influenza and 16 (22.9 per cent) died of the disease. Of 199 new patients admitted between November 1, 1918, and November 1, 1919, 42 or 21.1 per cent gave a definite history of influenza. Of these 42, 18 knew they had tuberculosis prior to their influenza, while 26 gave a history of previous symptoms that were presumably tuberculous. In 12 cases the onset of tuberculosis was definitely post-influenzal.

The authors conclude that tuberculosis does not confer an immunity to influenza, that influenza is not less severe among the tuberculous, that among their own patients the case fatality was higher than among the general population, that among a certain number of individuals influenza marks the inception of pulmonary tuberculosis, and that to ignore or deny the possibility of pulmonary tuberculosis as a sequela is to unduly defer diagnosis and early treatment. (American Review of Tuberculosis, April 1920.)

R

Roentgenization of the Vessels

C. L. Martin, Boston (Journal A. M. A., March 13, 1920), has studied the roentgenograms of the large vessels under various conditions, such as arteriosclerosis, hypertension, chronic endocarditis, high diaphragm or dilated pulmonary artery which may confuse the diagnosis, and in his article covers the findings rather extensively. It would probably be wiser to accept the diagnosis of aortitis only in those cases that show localized prominence at the base of the ascending aorta. All of these conditions are not uncommon with aortitis, and a high diaphragm is not infrequently associated. It is the exception rather than the rule, he says, to find a single cause underlying increased suprarecardiac dulness. A number of cases are reported illustrating the conditions found.

R

Short Caliper Splint

A short caliper splint developed by R. F. Patterson, Knoxville, Tenn., in his orthope-

die service at Fort Sam Houston, Texas, is described by him in the (*Journal A. M. A.*, Feb. 7, 1920). It proved uniformly useful as applied to ununited fractures below the knee, in weak union to guard against mishap, and in tuberculosis or other disease of the ankle or foot, when it is desired to take weight off the foot. The advantage claimed for the appliance over the long caliper splint in cases of fracture below the knee are its nonconspicuous (it can be worn underneath the trousers); leaving the knee free and thereby avoiding immobilization of the joint. Lastly, in addition to removing the weight from a fractured bone, it acts as an effectual splint through the medium of the close fitting leather cuff reinforced by the side irons.

R

Heart Disease as a Public Health Problem

Among 5,000,000 men of military age, more than 200,000 were disqualified for service because of heart defects. In one of the large and carefully managed life insurance companies, during the period from 1915 to 1918, the rate of rejection for heart defects was 24.4 per thousand, in spite of the fact that persons with the more obvious forms of heart disease are not likely to apply for insurance. A report of the Department of Health of New York City, covering over 250,000 examinations made by school medical inspectors during the year 1918, revealed an incident of heart defects among schoolchildren of 1.6 per cent. An analysis of the mortality statistics of 1,066,711 deaths shows that diseases of the heart were responsible for almost one eighth of the deaths of all ages and for almost one fifth of the deaths in persons of 40 years of age and over. Lewis A. Conner, New York (*Journal A. M. A.*, June 5, 1920), states that the movement, which is now gathering headway, for the improvement and coordination of existing agencies for the relief of sufferers from heart disease and for arousing interest and cooperation in the problems of prevention has come into existence not so much because of the frequency of cardiac disease as because of the conviction that the present methods of dealing with the problem involve enormous economic waste and immeasurable suffering, much of which is unnecessary and preventable. Conner details the aims, objects and activities of the Association for the Prevention and Relief of Heart Disease of New York. Briefly, its accomplishments up to the present time may be thus outlined: 1. The encouragement of the formation of special cardiac dispensary classes. 2. The in-

creasing of facilities for the care of suitable heart patients in convalescent homes. 3. The arousing of great interest in the welfare of schoolchildren with heart disorders. 4. The accomplishment of a good deal individually by the social service workers in the various dispensary heart classes, in the matter of providing heart ripples with more suitable occupation. A great part of this burden has been taken over by the Employment Bureau for the Handicapped, maintained by the Hospital Social Service Association. Special heart clinics are also in operation in Boston, Chicago and other cities, and the formation of a national organization dedicated to this object would seem to be the next logical step.

R

Recent Statistics of Heart Disease

Of 8,408 deaths of males, analyzed by Frederick L. Hoffman, Newark, N. J. (*Journal A. M. A.*, May 15, 1920), 1,811, or 21.5 per cent., were those complicated by diseases of the heart; and by specific impairments, 531 cases were complications of valvular disease; 347 cases, of endocarditis; 339 cases, of myocarditis; 215 cases, of organic disease of the heart not otherwise specified, and 169 cases, of cardiac asthma and dilation, etc. In the same experience there were 390 deaths from Bright's disease complicated by arterial disease, principally cerebral apoplexy, from which there were 307 deaths; and arteriosclerosis, from which there were seventy-three deaths. The article contains many statistical tables, all of which are of value to practitioners of medicine.

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THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, JULY, 1920

No. 7

Polycythemia Rubra (Erythremia)—Report of a Case

BY WILBUR A. BAKER, M. D., LEAVENWORTH

Delivered at the Annual Meeting of the Kansas State
Medical Society at Hutchinson, May 5, 1920.

This rather uncommon disease has been described under various captions, principal of which are absolute polycythemia, Vaquez's disease, Osler's disease, polycythemia with chronic cyanosis, myelopathic polycythemia, splenomegalic polycythemia, cryptogenic polycythemia, erythrocytosis megalosplenica and autotoxic enterogenous polycythemia.

Probably the first authentic case of this disease was one reported by H. Vaquez (1) of Paris in 1892. The outstanding features of his case were cyanosis, persistent polycythemia and increase of hemoglobin, and enlargement of the liver and spleen. He regarded the case as one of congenital heart disease until his patient died in 1895. The autopsy showed no organic heart involvement. Several similar cases were reported during the next few years but it was not until 1902 that the disease was referred to as a clinical entity in connection with a case reported by Saundby and Russell (2). In 1903 and 1904 Osler published two papers (3) which served to bring this condition prominently before the profession and establish its existence. In his first article he reports four cases and reviews five others previously reported. He states that the clinical picture is quite distinctive, although the symptoms are somewhat indefinite and the pathology quite obscure. In his second article he adds several more cases. Following these two papers by Osler quite a number of cases were reported, and

in 1912 Lucas (4), in a most painstaking review of the literature, was able to collect 189 cases. One hundred forty nine of these cases he regards as unquestionable instances of polycythemia rubra or erythremia.

Etiology. The cause of the disease is unknown. Splenic tuberculosis was found in several cases reported by the earlier writers and was regarded by them as being the cause. A primary hyperplasia of the red bone marrow has been regarded by many writers as the probable cause. Nervous excitement, mental worry, toxemia originating in the spleen, lungs or alimentary canal, and a compensatory reaction toward some hypothetical disturbance in the gas exchanging functions of the blood have all been suggested as possible etiological factors.

Symptoms. Osler (3) describes the disease as being characterized by chronic cyanosis, absolute polycytemia and moderate enlargement of the spleen. Lucas (4) in a most thorough manner has tabulated all the various symptoms and signs, and has given the percentage of the reported cases in which each was present. He describes the disease as being characterized by marked, persistent and absolute increase of the red blood corpuscles, marked increase in the viscosity and total volume of the blood, excessive erythroblastic activity of the bone marrow, and usually by characteristic changes in the eye grounds, cyanosis, and enlargement of the spleen. On the whole the most constant features seem to be persistent and absolute polycytemia, splenic enlargement and some intensification of the color of the skin, especially that of the exposed surfaces. In many cases

the skin condition is not described as a true cyanosis, but rather as an intense reddening or florid appearance. Such was true of the case here reported. The skin changes are practically always most marked on the exposed surfaces. There is usually a duskeness of the tongue and mucous membranes. Hemorrhages of some sort have been noted in many of the cases. Many patients have shown some eye symptoms, and in practically all cases where an ophthalmoscopic examination was made some changes in the fundus were noted.

The most common symptoms complained of by these patients are those of cerebral congestion, such as vertigo and a feeling of fullness in the head, gastrointestinal symptoms, dyspnea, extreme nervousness, lassitude and weakness. In some of the cases reported, the symptoms have been modified by other conditions intercurrent. Tyrrell (5) reports a case in which his patient, following a severe fright, suddenly developed a swelling of the neck and thyroid gland. From that time on his patient showed definite symptoms of hyperthyroidism in addition to his other symptoms.

Laboratory Findings. Blood. The most striking feature about the blood is the absolute and persistent increase in the number of erythrocytes in the circulating blood. This increase varies a great deal in different patients and in the same patient at different times. In the majority of cases reported the number of red cells ranges from six to eleven million. It is interesting to note that although all these cases show a marked increase in the number of red cells, only a very small number show nucleated red cells in the eirculating blood. If the disease were due to a primary hyperplasia of the red bone marrow and a marked overproduction of red cells one would expect to find some of the various types of immature red cells such as we find in the blood of pernicious anemia patients. If, on the other hand, the increase in cells were due to a loss of fluid and a concentration of the blood one would expect to find a deerease in the total volume of the blood.

According to Lucas the total volume was estimated in eight of the cases he collected from the literature, and in each of these it much exeeded the normal. Such a combination makes one wonder if there could not be some derangement of the organs of blood destruction, whatever they may be.

In the majority of cases reported the hemoglobin percentage has been low in proportion to the number of red eells. Since the technie used in estimating the hemoglobin percentage is not given in most of the case reports, it is hardly possible for one to determine accurately a color index.

The viscosity of the blood, as one might expect, is markedly increased in all cases. One of the first things that impresses a person in making the blood examination is the extreme difficulty in preparing smears thin enough to stain and study satisfactorily.

The coagulation time is usually shortened.

According to Lucas, 27 per cent of the case reports that he reviewed showed a moderate leukocytosis, and 15 per cent showed a marked leukocytosis.

So far too little has been done on the chemistry of the blood in these cases to make the findings of any special significance.

Dr. Maude Abbott (6) worked out the basal metabolism on a case of polycythemia. She found the metabolic rate to be increased as much as 28.7 per cent above normal, and states that this is about the same increase as is found in severe cases of pernicious anemia.

Urine. Slight albuminuria and cylindruria is present in the majority of cases. Casts are not infrequently found.

Autopsies. Thus far, in the cases upon which autopsies have been reported the findings vary considerably, and no definite lesion has been demonstrated which would help materially in clearing up the etiology.

Prognosis. The prognosis seems to be almost uniformly bad. A few cures have been reported but in nearly all these instances not enough time has elapsed to be sure

that a cure has really been effected. The duration of the disease is rather difficult to determine in most cases, as one cannot be sure how long it has been in progress before the patient came under observation. In some instances it seems to have extended over periods of from ten to fifteen years.

Treatment. No treatment has proven uniformly satisfactory. Bleeding is practically always followed by temporary relief. Seemingly about half the drugs in the pharmacopoeia have been tried but few have given any results worthy of note. Benzol is perhaps one of the most promising of the drugs. The Roentgen rays administered over the spleen have apparently helped in some cases. Hurwitz and Falconer (7) report a case treated with X-ray and Benzol which has apparently, remained cured for over a year.

The case which has come under my observation is as follows:

Case Report.—The patient, Mrs. C., came into the clinic November 11, 1919, complaining of extreme nausea and pain in the head. She is a farmer's wife, aged 39, was married at 18, and has always worked hard. Family history unimportant. She has raised a family of five children, all of whom are in good health. Had two miscarriages, one at three months and one at four months, about two years after her first child was born, sixteen years ago. During her next pregnancy she had to go to bed for three months previous to delivery to avoid miscarriage. Had no trouble in subsequent pregnancies. She says she had to raise all her children on a bottle because her breasts never showed any signs of milk secretion.

Patient says she had never been sick to speak of until the spring of 1914, when she developed a severe pain in her left side and became weak and "all done up." Was not able to work much then for about three years, and in February, 1917, she was operated on by Dr. Risdon for a prolapse of the uterus. She felt very well for about one year after her operation. About two years ago she missed several

menstrual periods and began having spells of dizziness and a feeling as if her head were too full. She became extremely nervous and noticed some shortness of breath. Marked lassitude, weakness, some indigestion, and constipation. Her condition became progressively worse. In September, 1918, the first and second fingers of her right hand became puffed and dark in color —throbbing pain in them which lasted for three or four months. She has never had normal strength in these fingers since.

In the early spring of 1919 she began having trouble with her eyes. She would have a severe pain in her eyeballs for a few days and when this disappeared her eyes would be quite sore. She went to an optician and was fitted with glasses which seemed to help her at times, but at other times they seemed to do no good.

In the summer of 1919 she noticed the sudden appearance of dark areas in the skin of her legs at certain intervals. The appearance of one of these was always preceded by a sudden pain in the area for a few minutes, then it rapidly become dark and in an hour it would be quite black. These areas would be tender to pressure for some time and it took about two weeks for them to disappear. It was about this time that she first began to notice an unusual redness of her face, neck, and hands. In August, 1919, she began to notice some feeling of nausea; in September she began to have spells of vomiting. The nausea has become so severe that she can hardly retain food at all. Lately she has noticed some pain in the posterior cervical region. Profuse perspiration, which has a bad odor. She has hardly been able to sleep at all for the past two months. She says she has lost about forty pounds in weight since her present illness began.

Physical Examination. Patient has the appearance of one who has lost considerable weight. The skin on her body is a bright pink in color and her face, neck and hands are an intense red. No cyanosis. Temperature 98.2—pulse 84—respiration 20. Tongue is a bright red with considerable coat in

the center. Mucous surfaces have a bluish red appearance. Reflexes normal. No adenopathy. Lungs negative. Heart slightly enlarged and a systolic murmur can be heard over the whole precordium but plainest at the apex. Blood pressure—systolic 195, diastolic, 130.

Abdomen. Large mass palpable in the left hyochondrium which extends to the level of the umbilicus. This mass is quite hard and its general contour is that of the spleen. The liver dullness is increased but the liver is not palpable below the costal margin.

A fluoroscopic examination of the chest was made, and radiograms were made of the chest and head. The report of our X-ray department is as follows: Head. Convolutions of the brain appear normal. The sella is somewhat narrowed and deeper than we often find. No definite pathological condition present.

Chest. Root markings of both lungs are prominent. Two small distinct shadows appear in the left side, probably due to calcified glands. Apices and periphery appear normal. Both angles are clear. The heart shadow is slightly larger than normal. The aorta and great vessels are increased in width.

Eyes. The report of our department of ophthalmology is as follows: Palpebral conjunctivae are intensely red but without signs of inflammation. The bulbar conjunctivae show slight injection, especially the horizontal vessels. The irides are spotted. Vision 15-30 in both eyes and both are corrected to 15-15 by glasses. Slight exophoria in right eye. Fundi. The left disc is pale and the outline hazy below. It shows very little or no cupping. A patch of choroid is visible just above the disc. The arteries are small and the veins very full and dark. All vessels very tortuous. There is a small amount of exudate along the vessels, giving the retina a woolly appearance. The retina itself is not dark or cyanosed. Macula negative. The right disc is pale and elongated vertically. No choroid visible. Margins very hazy but there is some

cupping. Vessels very tortuous. Arteries are very small and veins very full and dark. Exudate along vessels, giving retina a woolly appearance. Retina not cyanosed but is a good red. Macula negative.

Laboratory Findings. Urine. The urine showed quite a marked variation from time to time. Upon one examination the reaction was weakly alkaline and a week later it was strongly acid. At times it has been negative for albumen, at other times it has shown a trace, and several times a considerable quantity. No sugar at any time. Finely granular casts were found upon several examinations. The urea has varied from 1.3 to 2 per cent. The phenolsulphonphthalein functional test showed as follows: First hour, fifty per cent; second hour, fifteen per cent; third hour, six per cent; total elimination in three hours, seventy one per cent.

Gastric analysis. Patient unable to swallow Rehfuss tube on account of nausea. Vomited material showed a total acidity of 73 and a free acidity of 28. Tests for blood and bile were negative.

Blood. The pipettes and chambers used in making counts were standardized by the U. S. Bureau of Standards. Hemoglobin determinations were made with the Dare hemoglobinometer. All colorimetric determinations were made with the Duboseq Colorimeter. The nonprotein nitrogen determinations were made after the colorimetric method of Folin and Dennis (8) with the trichloracetic modification of Greenwald (9); blood sugar by the Benedict (10) modification of the method of Lewis and Benedict; cholesterol by the Lichtenhaeler modification of the method of Antenrieth and Funk (11).

The blood sugar has always been high, ranging from .113 to .211 per cent. The nonprotein nitrogen has usually been about 40.0 mg per 100 cc of blood, however, one determination showed 70.0 mg per 100 cc of blood. At the time this determination was made the urine showed a marked increase in the quantity of albumen present. The cholesterol has remained fairly constant,

varying only between 155.0 and 162.6 mg per 100 cc of blood. The specific gravity ranged from 1.060 to 1.072. The blood coagulation time was 51-2 minutes. The blood Wassermann was negative by both the warm and cold fixation methods.

January first to the twenty-fifth and felt unusually well during that time. She had three menstrual periods, each lasting two or three days, during March. Patient has been able to do part of her housework since about March first. Says she has slept well

Date	Erythrocytes	Hgb.	Leukocytes	Polymorpha-nuclear Neutrophiles %	Small Lymphocytes	Large Lymphocytes	Remarks
11-17-19	8,000,000	104	11,000	88.5	3.5	2.5	Transitional 1.5% Eosinophiles 0.5% Degenerates 3.5%
11-20-19	9,000,000	108	10,300	91	5	1	Transitional 1% Degen. 2%
11-29-19							Blood pressure—Systolic 200 Diastolic 120
12- 2-19	8,400,000	108	15,000	87	6	4	Tran. 1% Degen. 2% Blood pressure—Syst. 175 Dias. 110
12-18-19	8,000,000	100	13,000	92	5	3	B. P. Syst. 170 Diast. 100
4- 2-20	10,720,000	104	14,800	79	14	1	Tran. 2% Eos. 2% Deg. 2%
4-14-20	8,560,000	100	13,900	87	10	1	Deg. 2% Blood P. Syst 200 Diastolic 130
4-27-20	7,500,000	100	11,200	85	11	0	Tran. 1% Deg. 3%

Course. The patient was entered at Saint John's Hospital on November 13, 1919. Various palliative measures were tried to relieve her nausea and pain in the head but with no result. About one week after her entrance venesection was done and 500 cc of blood withdrawn. Patient vomited, complained of pain in the head and chilly feeling that night; the next day her condition was greatly improved and she continued to improve for several days thereafter. Fullness in head and nausea disappeared. In about ten days she began having some feeling of fullness in the head, and another 500 cc of blood was withdrawn. Marked improvement followed. On December second, patient was sufficiently improved to be taken to the clinic where she was given a forty milliamperc minute dose of X-ray over the spleen. This treatment was repeated every three or four days, and on December eighteenth she was so much improved symptomatically that she was allowed to go home. For the next two months she came in twice each week for X-ray treatments. Since then she has been receiving these treatments once a week. During her entire stay in the hospital her temperature ranged from 97 to 98, pulse 64 to 88, and respiration 18 to 20.

Patient menstruated continuously from

and had an unusually good appetite since going home from the hospital. Upon several occasions since leaving the hospital she has complained of a slight feeling of fullness in her head, and upon each of these occasions it was noted that her blood pressure was higher than usual. Bleeding promptly relieved this trouble. When patient first comes in on a cold day her hands show a slight cyanosis, but this changes to an intense red when she has been in a warm room for a short time. She says she has not taken cold all winter—during previous winters she took cold very easily.

On April second, 1920, patient was started on ten minim doses of benzol three times a day. April ninth, complained of hot flashes over the body. April fourteenth her urine showed a marked increase in albumin and the nonprotein nitrogen of the blood was 70 mg per 100 cc, an increase of 30 mg over previous estimations. In spite of this the benzol was continued.

April twenty-first patient stated she was feeling fine. Urine showed only a faint trace of albumen and the nonprotein nitrogen of the blood was 46 mg per 100 cc. April twenty-seventh she mentioned having a slight headache but not the same fullness in the head that she had suffered from so much before. She thinks the Benzol is help-

ing her a great deal. Urine shows a trace of albumen.

The patient has improved so much symptomatically that she thinks she is getting well. The redness of the skin on her body has disappeared entirely and that of her face, neck and hands has decreased markedly in intensity. Her spleen is practically the same size as when she began treatment. Her blood picture shows no sign of permanent improvement. Although we have relieved her of her most disagreeable symptoms we cannot feel we have accomplished anything as yet in the way of a cure.

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R Epilepsy

BY O. S. HUBBARD, M. D., PARSONS

Delivered at the Annual Meeting of the Kansas State Medical Society at Hutchinson, May 5, 1920.

Americans are prone, and justly so, to feel proud of their country, its history, its people and its institutions, but it is well at times to pause to take stock to think seriously about certain unpleasant facts. We should see the dark as well as the shining side of the shield. As medical men there

are certain matters which appeal to us in particular, and on which we should be leaders of public opinion. At the risk of being tiresome, "lest we forget," I am going to direct your attention to the ever growing number of the unfit; the insane, the feeble-minded, the criminal, and the epileptic. These unfortunate people constitute a real menace to society, they are already a serious load in a financial way and bid fair at no very distant day to become an almost intolerable burden. Seemingly present methods are inadequate for handling the situation; some contend that the increase in insanity, feeble-mindedness, and epilepsy is more apparent than real but the opinion of most students of the subjects is that there is an actual increase, beyond all question this is true of the negro race.

The horrors and havoc of the world war cannot do otherwise than make European conditions worse; the soldiers wounded and killed, particularly early in the war were the best young men of Europe and the next generation will be from a less perfect stock. It is notoriously true that in the past Europe unloaded its undesirables upon this country, we have received its defectives of all classes, among them as recent events have shown, its vicious red agitators. From now on better safeguards should be thrown up against European defectives. Government statistics show that in the period extending from 1910 to 1918 the population of the United States increased about 13 1-2 per cent, while the number of insane in institutions increased twice this per cent; in 1916 there were 576 institutions for the insane in this country with a property valuation of \$408,000,000, caring for a population of 395,000. The number of these unfortunate people exceeds the population of Kansas City or they would populate fifteen or more cities like Hutchinson. They outnumber the college students of the country, including the professional schools, they exceed in number the population of any one of five of the sovereign states of this country.

The insane are a serious problem and one

somewhat easily seen the feeble-minded are not so easily observed but are a far greater menace, few of them are segregated, they constitute a serious threat to democracy, the very existence of which depends upon the intelligence of the average man. The feeble-minded hinder the work of the public school, they are easily led by agitators, they constitute a large part of those who are unable to make a respectable living, they are frequent and repeated offenders against morality and the law.

These statements apply in many ways to the epileptics. While many epileptics preserve their mentality to a remarkable degree, a large percentage of them are feeble-minded, many are insane, and some are criminal and dangerous. Statistics concerning them are hard to obtain but it is rather generally accepted among students of epilepsy that one person in every five hundred is epileptic, if so the epileptic population of the United States exceeds 200,000, that of Kansas 3,000. There are 550 epileptics in the State Hospital at Parsons. The epileptics of this country outnumber the population of the state of Wyoming and compare with that of the city of Denver. Of the many classes of the afflicted, none are more to be pitied. The repulsive outward manifestations of the disease cause them to be shunned or ridiculed by their fellows. If their seizures are frequent their lot is indeed hard, they are kept in the back ground in the home, the public school is closed to them, they are barred from places of amusement, they are deprived of opportunity to attend church though often religious in temperament, they cannot hold a job as they endanger those about them as well as themselves. They are in constant danger from falls, from machinery, from water and fire, and in numerous other ways. They are practically cut off from most of the things which make life pleasant to the average mortal. These restrictions are felt particularly by those of good mentality; my sympathy has extended especially to a number of bright boys of high school age with this dreadful shadow hanging over

them. The tendency of the disease is towards mental clouding, insanity and dementia, though some remain in good mental condition to the end of life.

Among the causes of epilepsy heredity stands in the foreground as the great cause, statistics as to this factor are hard to get and often confusing but its paramount importance is certain. Authorities differ in their figures. Kraeplin finds heredity in 75%, Spratling gives 56%, Gowers 40%, and others similar percentages. In a study of 1600 epileptic patients admitted to the State Hospital there were about 740 in whom no known or probable cause could be found, often due to a faulty history. In the remaining 860 cases, the cause was attributed to heredity in 305 cases, or about 35 per cent. There is a tendency in some quarters to minimize the importance of heredity in epilepsy, insanity, and other nervous diseases. Records at the State Hospital show that in 18 instances two or more members of the same family have been patients in the hospital, in seven cases the relationship being that of parent and child, in nine cases that of brother and sister. This seems to me to establish beyond question the importance of heredity, the only other factor which could explain it being some cause incident to the family, life, such as bad hygiene, a specific infection, etc., and this is highly improbable because those who live in close association with many epileptics do not develop the disease. There is considerable evidence that epilepsy in many cases follows Mendel's laws of heredity, not as an entity but as a recessive factor with feeble-mindedness and similar conditions; that is, some individuals lack the determiner for normal development, and therefore may become epileptic, feeble-minded etc.

With this stage of our knowledge it is evident that epileptics should not reproduce, but we find that a considerable percentage of epileptics marry. In our study of 1600 patients, 475 or about 30 per cent had married. When we consider that 411 of those admitted were less than 20 years of

age it brings the number of those of marriageable age who married to almost 40 per cent. When we learn that more than 1000 of those admitted had their first seizure before they were 20, the necessity of some control is more apparent.

Next to heredity as a cause of epilepsy must be placed the brain injuries of early life, which may be considered under the name of infantile cerebropathies. These are intra uterine lesions, birth injuries due to forceps and prolonged and precipitate labor, and the numerous brain injuries occurring in the first few years of life.

Not a few children are injured permanently by bad obstetrics, forceps are highly undesirable when not really indicated, probably the improper use of pituitrin is equally objectionable. The obstetrician does not see the end result of improper work but the neurologist does. The most common cerebropathy comes somewhat as follows: a child one to three years old becomes sick, usually from some gastro-intestinal condition, has considerable fever and suddenly goes into a prolonged spasm, perhaps lasting for several hours, sometimes there is a series of these spasms. Just what the pathology of this condition is seems unsettled, perhaps it is an infection, a localized cerebritis, perhaps a hemorrhage. Following such an attack the child may get better, though usually with some degree of muscular weakness, varying from marked hemiplegia to a weakness so slight as to be detected with difficulty. It is probable that lesions in the silent areas of the brain exist with no muscular involvement.

Seizures may follow these infantile lesions rather soon but often there is a period of some years, then unexpectedly, perhaps at puberty a seizure occurs and usually these continue. The lesson is obvious, young children should be guarded most carefully, when sick from stomach or bowel disturbance or the common contagious diseases, particularly scarlet fever. The practice of giving little children the same food as adults is wrong and beyond a doubt is responsible for many epileptics. The old

notion that spasms in infancy, "worm fits", are of no importance, "all babies have them" etc., is a fallacy and needs contradiction; most infantile spasms are not followed by epilepsy but many are and the very occurrence of a spasm indicates an irritated and unstable cerebral cortex. The brain of a young child is an exceedingly delicate structure and needs careful protection. Recently a writer named Morse has denied the relationship between infantile spasms and epilepsy but the story outlined has been told to me so often that I feel very sure of my opinion. Diverting for a moment, but thinking along a similar line, it may be said that the modern picture show with its excitement, its appeal to the emotions, its melodrama, and its bloody tragedy, is highly undesirable for children of tender years. It seems certain that the importance of infantile cerebropathies as a cause of epilepsy has not been recognized by physicians in general nor by neurologists. At the State Hospital more than 10 per cent of the cases admitted have been attributed to this cause.

In this connection, head trauma in older persons may be mentioned. Sixty-one cases due to this cause have been recorded, some of them very definite, others with a degree of uncertainty. Two gun shot wounds with great destruction of brain tissue are of interest in showing what the brain can tolerate without marked reduction of mentality. In this connection allow me to say that the time for surgery in head injuries, depressed fractures, etc., is the earliest possible date; after epilepsy is established the prognosis is not good.

The epilepsy of advanced life is of considerable importance. About five per cent of the State Hospital cases became epileptic after fifty years of age, which is not according to the text books. Authorities teach that late epilepsy is nearly always due to syphilis. I believe that this is a mistake and that circulatory changes in the brain, not necessarily nor commonly syphilitic, are the essential causes.

The treatment of epilepsy is unsatisfac-

tory; the three causes of the disease mentioned suggest why it will always be unsatisfactory. Hereditary nervous instability, infantile cerebropathies which are organic brain lesions, and arterial changes due to advancing years, do not offer very much opportunity for successful treatment. The first step in treating any disease is diagnosis; at the State Hospital sixty-five patients have been admitted who were not epileptic. Among these were eleven cases of major hysteria, eight of dementia precox, fourteen of general pareses, and thirteen of manic-depressive insanity.

Many cases of epilepsy in the early stages are not recognized, parents are told that "he will outgrow it," "only a little nervousness", etc. In this way the best time for rational treatment is lost and the patient drifts into the hands of irregulars or begins the destructive patent medicine route. Not ten per cent of those who enter the State Hospital can be regarded as other than custodial cases; eighty percent of those admitted have been epileptic more than five years. When one has heard the patent medicine story very often from patients or their relatives one begins to realize how easily and how regularly people are victimized in this way. But after all, are these men any worse, are they as guilty as the newspaper men who knowingly print these and similar advertisements.

Probably when conditions are favorable, careful home treatment, wisely directed and persisted in for a long time offers the best prognosis. Among drugs, bromides still remain prominent and in many cases are very useful, in selected cases digitalis as an adjunct is valuable. At present luminal is giving good results in some cases. More important than any drug is general hygiene, careful regulation of the life as to diet, sleep, habits, work, etc.

For those who cannot have favorable conditions at home, and that means the vast majority, institutional treatment offers the best chance. Some of us realize its limitations and shortcomings only too well but these are too many and too intricate for

discussion. State institutions for the insane and epileptic always have been and probably always will be custodial rather than curative in character.

The functions of the State Hospital may be enumerated under the following heads:

1. A home for unfortunates.
2. A place to segregate the dangerous and troublesome.
3. A place to teach epileptics how to live outside.
4. A place where active treatment is carried out.

I have tried to bring to your attention the seriousness of the question of epilepsy and kindred diseases, in the hope that each one will take greater interest in these unfortunate individuals.

B

Tuberculosis

BY JEFFERSON DEMETRIUS GIBSON, M. D., DENVER,
COLORADO

Delivered at the Annual Meeting of the Kansas State Medical Society at Hutchinson, May 5, 1920.

Pulmonary Tuberculosis is an infection or septic inflammation of the lungs and other tissues in the chest. It may be acute or chronic within itself, or a pure phthisis may have a great many different complications engrafted upon it. Many of these complications will render the disease much more serious than a pure tubercular infection. In fact many physicians minimize a pure tubercular condition and attribute most all of the dangers of tuberculosis to complications by other infections; so I want to impress upon you this evening the great importance of complications and warn you of the absolute necessity of controlling these complications to be able to cure the tuberculous process. In doing this I do not wish to minimize the dangers from the real pure cultures of ordinary tuberculosis that has gained a lodgement in the lung tissues of the individual.

In this paper I will not dwell upon all of the complications, because most of you physicians know how to handle and care for the majority of these conditions, and will only speak of a few of them as a means

to demonstrate more clearly my views and ideas in a real tubercular condition.

The most frequent complication we come in contact with in pulmonary tuberculosis is what is known as the mixed infections, or pus forming microbes, either single or in combinations making a pathological entity in complication with the tubercular bacilli. While there is no doubt in normal lungs these microbes may exist and be non pathological; many authors think they frequently lead only a saprophytic life in the debris of the bacilli, yet we know from vast clinical experience that they are capable of increasing temperature, increasing expectoration, of producing chills, night sweats and increasing loss of weight, loss of vitality and many other untoward symptoms in tubercular cases.

Again, we have still more severe forms of complications where we have a real pneumonia, lobar or bronchial variety, engrafted upon cases of ordinary tuberculosis. These pneumonic conditions involving a whole lobe, two or three lobes, are beautifully demonstrated in skiagrams Nos. 16 and 19. These cases are exceedingly serious and a vast majority of them ordinarily fail to recover and die as "Galloping Consumption" or "Ulcerated Tuberculosis."

I am going to report a few cases, that you may follow me more closely in the discussion of this subject.

Case 1. The first case I will report is an early acute, active case of pulmonary tuberculosis. This case came to me the 22nd of May, 1919. She had been confined to her bed for some time with high temperature, hemorrhages, night sweats and active exacerbations generally of pulmonary tuberculosis. The lantern slide before treatment, shows the mottling of infiltration, etc., in the lungs at her first visit. Temperature 101.5. Pulse 105 at the commencement of treatment. Patient emaciated and quite sick. She was placed on heart tonics, peptin, etc., and given instructions along the line of rest, diet, forced feeding, fresh air, etc., to which was added X-ray, electricity and ozonized oil nebula as is usually given

in my method of work. The case progressed very nicely and she was allowed to resume her work as stenographer at the end of four months. The treatment was continued for six months, and patient was dismissed as probably well. The skiagrams taken at the end of treatment shows how the exudate in this early case has been absorbed and removed, and not only the bacilli removed from the sputum, but also very likely from her lungs as well.

Case II. This patient when she presented herself to me for treatment was in a very dangerous condition. The whole of the upper right lobe was absolutely solidified down to the transverse fissure, the markings of which were perfectly shown and commencing involvement of the other lobes; the left lung only slightly involved. Temperature 104. Pulse 120. Under ordinary method of treatment she made no improvement, so an X-ray machine was installed in her room and X-ray treatments from this machine were given, alternated with high frequency from the same portable outfit. She had an exceedingly stormy siege of illness for several months, probably having in that time 15 to 20 hemorrhages, chills, night sweats and high temperature continuously during April and May. A great deal of abdominal symptoms developed; the bowels moved from 15 to 20 times per day for several weeks before they could be brought under control; but by patient perseverance, in July symptoms began to improve. After daily application of X-ray to the bowels, and other medication, the abdominal symptoms were controlled and the bowels checked. The temperature gradually improved and by the latter part of August, definite symptoms of recovery were noted. In September treatment was discontinued and patient continued to make steady and definite recovery. The first skiagram was taken in July when patient was in her most serious condition. A skiagram, taken in the following December, shows the immense amount of absorption of exudate and fibrosed tissue in the right lung, also how rapidly the left lung cleared up from

the acute involvement which it had sustained.

Case III. Another case I will show you for illustration is that of an old, long standing, bronchial fibroid condition, upon which had developed an acute exacerbation. The Roentgenogram taken before treatment shows the immense amount of consolidation of both lungs of this patient. One lung is almost entirely consolidated, the other is badly so. This patient had been suffering with chronic tuberculosis, with an occasional acute exacerbation of the condition for sixteen years before coming to me; but her resistance had given away and she was losing rapidly before the invasion of the disease when first seen by me. She had a large cavity in the top of her left lung. She was running high temperature; also had a very troublesome condition, probably of tubercular origin in the right illiac region, which added greatly to her annoyance and temperature. The first six months of this patient's treatment was filled with exacerbations; but she was finally very much benefitted. She was allowed to return to her home in the North West, and returned six months later for a second course of treatment. She was allowed to return to her home again for one year, and then returned for the third course of treatment, after which she was dismissed from treatment. A skiagram taken after treatment shows removal of the tremendous amount of exudate and fibrosed material from these lungs. Remember that most of this fibrosis had been of many years duration before treatment; therefore, making its removal very slow and difficult. This lady at the present time weighs more, and is stouter and stronger than she has been for twenty years. I do not believe it will be necessary for her to ever have any more treatments, and I am very certain that she will never die from tuberculosis.

Case IV. Another case which I will demonstrate to you is the case that we will take for our text in this paper. It is an advanced acute lobar or acute ulcerated tuberculosis of miliary type; or what is

generally known as "Galloping Consumption," following child-birth. This patient reached Denver in an extremely precarious condition. She was rushed in a wheel chair to the nearest hotel, put to bed and given stimulants. Her temperature was 104.5 in the early morning; she was having two pronounced chills a day; temperature in the afternoons running to 105; pulse exceedingly weak and fast; respiration very rapid; and the physical examination disclosed complete consolidation of the upper lobe of the right lung with a large cavity in the upper apex; and the lower lobes filled with millions of small disseminated tubercles, like grains of wheat or millet seeds; and the upper lobe of the left lung was infiltrated; and the whole lobe can be marked out in the skiagram from tubercular markings and infiltrations of the lobe itself. Patient only weighed 70 pounds. Her age was 32, the mother of five children, the youngest seven or eight months old, from which the mother dated her present illness.

The skiagram demonstrated very clearly the seriousness of the case. In the upper lobe of the right lung the microbes were winning a great victory, and their "onrush" into the tissues was nothing less than frightful; the defenses of the patient were absolutely smashed; there was nothing but toxin everywhere; and Nature was not able to produce anti-toxin, immune bodies nor complements sufficient to control the situation, nor in this condition was the right kind of phagocytosis taking place. It is true that polynuclears were in great abundance, the tissues all choked with them. You must remember that the polynuclears have no part in the fight against tuberculosis, but are a power especially for the pneumococcus infection. When you look at this picture it is no trouble to realize that the lung was absolutely disorganized. In a "mass involvement" like this the alveoli cells, infundibuli, bronchioles, and lymph channels are all filled with debris of dead and ruined cells, epithelial cells, poly-nuclear leucocytes, all disorganized and crowded into all spaces as exudates every-

where. Weakened blood vessels, choked lymph channels, distorted and filled alveoli and infundibuli speak of impending ruin and disintegration unless order is brought out of chaos. Can this be done? I say, "Yes, and successfully at once as a general procedure instead of the exception".

The first thing we must do in a case like this is bring order out of discord, aid Nature in bringing up reinforcements and organize our defensive powers that the onward rush of the victorious bacilli may be checked. In other words, Nature must be assisted so completely that she may re-act and bring to bear enough "immune bodies", "co-ferments" and "complements" to neutralize all sensitized antigens in this great field of battle. Between the invaders and the defensive powers of the host "opsonins" must be produced in great quantities that may prepare these microbes for an easy prey for the leucocytes, and the leucocytes must be furnished and prepared in enormous quantities. The especial leucocytes that have the power of being able to engulf the tubercle bacilli wherever found, opsonized or probably without opsonin to a large extent.

I will say right here that up to the present time, and unless I can demonstrate to the contrary now, we have never had a positive definite specific agent in the treatment of endo-toxin infections; so follow me closely and watch my reasons, as I do not wish to make unreasonable claims; but I would not be doing my duty to you, to the medical profession, the State, nor those suffering with tuberculosis if I did not talk plainly.

In the case in hand we have most every complication in the way of microbial infection, and in its worst forms that we can come in contact with; so the first thing that we think of in looking after this patient, after stimulants of strychnine, whiskey, digitalis, etc., are administered, milk and nourishment are prescribed as needed; cold, ice towels to the head, and absolute rest is enjoined, windows opened wide for the admission of plenty of fresh air; in other words, the ordinary routine of necessities

attended to in the usual manner; then the next thing is to aid the patient to re-act for the production of "immune bodies", "ferments" and "complements." For this purpose in a patient as above described, I use as a first procedure, some well known anti-streptococic serum, usually X cc at the dose; and instead of giving it hypodermically, I use it by the rectum, introduced through a rubber tube several inches up the bowels, once in twenty-four hours, usually about bed-time, just before the patient begins his nightly slumber. You remember this serum is supposed to contain large numbers of amoebaeptors as well as sensitized antigens from many strains of bacteria; and I think by these means we are able to get these sensitized antigens and also immune bodies rapidly into the circulation and without trauma to the patient; and also in a way in which his system is not shocked and thrown into confusion as is frequently done when used hypodermically. Also, when used in this way we do not have to be quite so careful about anaphylaxis. This should be kept up once every twenty-four hours, if results are good. for six or eight doses, when patient may be allowed to rest for two or three days, when more can be given if needed. This I think is a decided help in controlling the great mass of infecting microbes. I find that the temperature begins to abate, the chills to be less severe and the sweats not so profuse. In other words I find there seems to be a weakening of the microbial effect, but there is not one antigen in this polyvalent serum that will aid in the destruction of a single tubercle bacilli, but it will aid and help to control almost every other microbe likely to be found in this mass.

To this is added at once and as soon as possible X-ray for its definite and specific power upon the normal and pathological tissues of the lungs. In a case like the one we are discussing, we cannot depend upon X-ray for its specific effects to control the heterogenous mixture of microbes found in this condition. As narrated above the serum

or mixed vaccines is used for this purpose, while the X-ray is reserved and used for its absolute power in controlling the tubercle bacilli. In addition to the basic lines of treatment as outlined above, namely, rest, hygiene, diet, forced feeding, fresh air and ordinary medicinal care; I add X-ray electricity and inhalation of an ozonized oil nebula for their special effects.

ELECTRICITY. This is such an important subject that its usefulness in relieving pathological conditions is such that many volumes could and have been written upon the subject; and I can only attempt to point out a few special indications and uses of electricity; and this in a very brief way.

I have found for many years that the static brush discharge and the Morton wave current have been of inestimable use in the treatment of pulmonary tuberculosis with X-ray. I find that I cannot get the effect of X-ray nor I cannot continue a sufficient dosage of X-ray over the length of time to get the effect desired without the effect of static electricity. I attribute this largely to the mechanical effect which is so elegantly demonstrated in static electricity, with so little amperage accompanying it as compared with that of other apparatus. By this means we are free probably from the catophoric effect of any other direct or continuous current.

You will notice in the description above of the disordered pathological condition found in the case of tuberculosis described, that the alveoli, infundibuli, small blood vessels and lymph channels are all blocked with the debris of the disorganized lung condition. Now, these infundibuli and aveoli cells, you will remember, are accompanied to the very terminals by muscular tissue, and the muscle fibers presided over especially by the pneumo-gastric and phrenic nerves.

Now, when we place a strong brush discharge or Morton wave current along the second, third, fourth and fifth cervical region, we probably are able to send contracting nerve and muscle effects right into the alveoli walls, which undoubtedly causes

a contraction of these walls; and if we cause a contraction of these alveoli walls, small broncheoles and infundibuli areas, won't we clear out the lymphatics and open up the alveoli cell puncta from which liquified disintegrated debris can be drained off through the opened-up lymphatic channels? By this means which is added to the "gripping and squeezing effect" of the X-ray itself, is it not possible to greatly increase the drainage of these areas, which certainly will hasten and aid the return to normal metabolism in a remarkable degree?

Static electricity is a great stimulant and eliminator of waste products in the body generally; it is one of the finest general tonics and weight builders we possess; and I use it as my main tonic in the treatment of pulmonary tuberculosis. Again, its stimulating, anodine and local counter-irritant effects makes it of splendid service in relieving neuralgic and pleuritic pains and other indeterminate uncomfortable sensations in the chest; thus making the patient very comfortable and at the same time increasing his hope and confidence in the procedures.

OZONE. Ozone is an allotropic oxygen, a gas with a bluish color with a density of $1\frac{1}{2}$ times oxygen and designated as O_3 . It is exceedingly unstabile, combining with the carbon radicals at every opportunity and has been used for many years as a mercantile oxidizing agent. It can readily be detected around static, dynamo and high frequency machines when in action. A very striking demonstration can be made by removing the end door of a static machine after a long period of activity. It has an odor peculiarly its own, and in its nascent state is quite irritating. If not handled and managed in the proper way a great deal of injury can be produced, but much benefit can be obtained by inhalation from its anti-septic and great oxidizing propensity.

Many articles have been written upon the harmfulness of ozone inhalation, and there is no doubt in the world that if it is carelessly handled and too much of its

fumes are allowed to enter into the inhalation mixture, such irritation can be produced; but it is equally true that a moderate amount of these fumes, mixed properly with air and nebulized oil, can be made not only beneficial but very pleasant to the mucous membranes of the patient. I find it a positive aid in the relief of chronic tubercular coughs, and I believe it lessens the danger of renewed infections taking place along the bronchial tree.

X-RAY. X-ray I consider the "capping stone" of the specific arch. In other words, I consider it, in tuberculosis, the greatest one agent the Lord has ever given to suffering humanity. It will be found in later years to be capable of curing or relieving more serious ailments than probably any other one agent. Many of these I have not time to discuss here, but mention them only to show you my enthusiasm and confidence in this great God-given agent. In fact, if I can demonstrate to you this evening its ability to produce absolutely specific results in systemic or pulmonary tuberculosis, I think I will have drawn upon it enough for one evening's lecture.

It is a well known fact that one of the first effects of the X-ray influences upon microbial life is to inhibit propagation, sporiation or cell division, and this so pronounced that it is a proverbial fact. Therefore, when we pour X-rays of sufficient strength and penetration through a lung as above described with a properly dosage, we inhibit the reproduction of the bacilli and the same influence lessens the vitality or vigor of the victorious microbes, and also interfere with the nourishment of the bacilli through its interference with the catalytic action of the ferment of the microbe from the bombardment of the tissues by the X-ray.

You will notice these are the effects of the rays "per se" as the bacilli are bombarded more and more with the rays; trouble and death for many of them are brought about from its effects on all sides. Now as this bombardment continues to the consternation of the microbes, note what is happening in the surrounding lung tissues.

There has been brought about along the outer defenses, where some vitality was still left, a turgescence and engorgement of all tissues, something you might say like a mild tanning stimulating effect such as you would get from sun influences upon the exposed skin, which energises and vitalizes afresh the exhausted tissues. With this engorgement comes also increased opsonic effect. These opsonins, you remember, are great factors in preparing the bacilli for easy engulfment by the leucocytes, and without their abundant production cases like the one reported would have no chance in winning a great victory by destroying the invading bacilli.

Next, we have under continued bombardment of this battle field, the production of two ferments, one "heat stable" and called "Co-ferment" or "immune body" and it is a positive specific for its sensitized antigen; and the other "heat labile" and called "Complement" which is necessary for the fulfillment of the specific action of the "co-ferments" on the sensitized antigen. You must remember that these co-ferments and antigens as produced by ordinary autogenous and stock vaccines are only for the specific use in mixed microbial part of the infection. As this bombardment continues we have drawn more and more blood and organized defensive material around all parts of the diseased areas, at the same time weakening the bacilli through the powerful vibrating effects of the rays. Also in this engorgement there is brought forward around and into the diseased areas, a great increase in the leucocytes. At first and especially in the class of cases which we are discussing we find a great increase in all of the leucocytes, even the polynuclear, as in these cases there is always a more or less mixed infection and all classes of phagocytes are needed. The bombardment being continued and the case progressing satisfactorily, there will gradually be developed by Nature's own processes under the stimulating and building effect of X-ray, an enormous number of mononuclear leucocytes and the large lymphocytes as has

been demonstrated by Gerald Webb and others to have the power and ability of digesting and destroying the tubercle bacilli with impunity, and it is probably the only leucocyte that has this faculty. Now, we have seen under the proper bombardment of X-rays the devitalizing effect produced upon the bacilli, making them an easy prey for the leucocytic engulfment and destruction. When the large mononuclear leucocytes engulf and destroy the bacilli, the toxin of the microbe is liberated by elimination into the lymphatics and blood stream of the host. This toxin, you must remember, is the poison of the bacilli and must be neutralized to save the host from destruction. In favorable cases we have created a powerful vaccine, or an autogenous anti-endotoxin amboceptor fully complemented, which is a specific for its sensitized antigen in this case and which remember is the endo-toxin of the killed bacilli, which according to all laws of vaccine production gives us a specific autogenous vaccine for tuberculosis, and these results are splendid judged by case incidence and case mortality. Again the microbe was destroyed in the tissues, was opsonized in the tissues, was engulfed and digested by the large mononuclear leucocytes. We have in its elimination antigens made from the whole bacilli as from the wax coating, protein and all other constituents of the bacilli, which gives us more specific possibilities than from any other vaccine.

While on the subject I want to call attention to the very important difference in the internal effects in the administration of the ordinary vaccine and tuberculin, compared with the autogenous vaccine made in the living tissues as just described. The ordinary vaccine and tuberculin are introduced hypodermically into the patient with no special preparation of the field of attack; and we have seen that in the production of the autogenous antigen and the production of the autogenous vaccine, the field has been especially prepared and made ready for them as they are gradually pro-

duced under the bombarding influence of the rays, thus producing no violent reaction, no disturbance of metabolism of any part of the body, but producing a calming and invigorating feeling of the patient and aiding his confidence and hope in the out-come of his ease.

I consider the ability to increase the large mononuclear leucocytes and other lymphocytes to an enormous degree of such great importance that I had the Hertert Clinical Laboratory of Denver, make some blood counts of many of my patients during their treatment to determine the effect of X-ray treatment upon the leucocytes. These counts were all made from patients who were doing splendidly and nearly ready for dismissal from their course of treatment. It demonstrated very clearly that there was an average of 1 to 2,000 percent increase in the patients treated with X-ray in comparison to some controls of tubercular patients who were not taking X-ray treatment.

Therefore, I am going to summarize the influences that we have tried to bring to bear demonstrating the ability of the methods to be described in restoring to health the chaotic lung referred to above.

The Effects of X-ray and Other Influences

Upon the Tuberclle Bacilli.

1. The first effect that we have from X-ray as we pour it through this mass infected, all through the lungs, is this: The inhibiting effects, which is known and accepted as a fact by all radio therapists, is the inhibition of the propagation of the microbes, not only the tubercular microbe but all kinds of microbes.
2. The next effect of X-ray is probably an interference with the microbe ferments in their catalytic effect in breaking down the cells of the tissues in their preparation of food for the microbes.
3. The lessening of the vigor and vitality of the bacilli under the continued, steady treatment and bombarding effects of the X-ray.
4. X-ray ultimately causes death and elimination of the bacilli from the lung and, of course, from

the sputum. 5. When the bacilli are being eliminated and destroyed, the fibrosed areas and encapsulated tubercles must be liquified to aid in their removal, and also for the release of the bacteria, so the special leucocytes may be able to attack and destroy them. 6. The production of vaccines through the elimination of the dead bacilli. 7. Vaccine production from the whole bacilli, wax, protein, fatty substances, etc. is made in great quantities and produces positive and decided constitutional effects.

Effect on Lung of Host.

1. The first effect of all light on life and protoplasm is soothing, pleasing and stimulating; and we know that one of the mildest and most direct stimulations of the rays through the lung tissue, in a new patient in his first treatment may be compared to the mildest tanning, just the least stimulation taken down all through the lungs which is penetrated and must be penetrated by X-ray.

2. Another thing we must remember is that the thicker, more solid and less air contained in the tissues, greater will be the resistance to the direct beams of X-ray light, and stronger will be the spangled, disseminated, secondary rays, which probably may be electrical, as they are lost or disseminated into these diseased cells, and it is this which gives us probably the "gripping and squeezing" effect of the X-ray.

3. We have what seems to be a "gripping, squeezing" effect produced by X-rays as they pass through these tissues.

4. Under the continued regular bombardment of the rays, a weakening, not only of the propagating powers of the bacilli, but under the continued "hammering" of the rays, there will be some weakened, inervated, death and destruction will occur in a few of the bacilli at the start, and these will increase more and more as the treatments are continued.

5. There will be, under the continued treatment, an increase of opsonins, and their negative and positive phases must not be lost sight of.

6. There will be produced as the mixed

infections are more or less eliminated and the tubercular condition comes more or less to the front, a great increase in the special leucocytes, the large mononuclear, which have the happy faculty of being able to engulf and digest the wax-coated tubercular bacilli with impunity and eliminate it into the lymph and blood streams absolutely without harm to itself; giving us an amoebocyte or immune body which is probably the greatest specific factor so far developed in the treatment of pulmonary tuberculosis.

7. From the elimination into the lymph and blood streams of the tubercular toxin, or endo-toxin, we have the remains of the whole bacilli—the wax-coating, the protein substance, fat, etc., thrown into the blood stream as antigens, and this in a growing and increasing abundance, almost at the will or dictation of the physician in charge as to the amount.

8. As just noted the liquified constituents of the whole bacilli in almost any quantity desired, when thrown into the blood stream produces the antigen, "par excellence", in this tubercular condition. This antigen produced in great quantities, never produced before in such quantities, compels the systemic condition to produce amoebocytes, or immune bodies, for its special neutralization. Therefore, from the abundance of autogenous antigens produced, have we not to meet these indications autogenous anti-endo-toxins which are compelled to be formed to meet these autogenous antigens. This being the case, if the autogenous anti-endo-toxin complemented is an absolute specific for the sensitized antigen, which in this case is the endo-toxin bacilli, how much does it lack of giving us a specific antibody for the tubercle bacilli?

9. As these treatments progress and continue we have gradually produced a normal hyperaemia and healthy engorgement, you might say, of the blood up to and around the infected areas. This engorgement of the blood brings with it the opsonins, leucocytes, nourishment and pabulum to aid in the work of re-construction—First, in the separation and division of the mass in-

fections in commencing encapsulation and re-invigoration of the tissues around and in the areas of infection.

10. This engorgement and re-vitalizing stimulation is such that almost every case of tubercular involvement can be made to clear up the debris and exudate and remove it from the alveoli, infundibuli, except in old calcified, hardened areas where fibrosis is complete in which there is no living microbe present.

11. In these "tubercular mass areas" or otherwise a genuine "crepitant redux" can and will be produced bearing the same relation to the tissues as it does to the same tissues in a revolving croupous pneumonia.

12. The great increase of the large mono-nuclear leucocytes gives us the means of throwing large quantities of the endo-toxin into the blood stream, forcing the production of the immune body described above.

13. Again, a great quantity of these leucocytes being present, the great amount of fibrosing of the lung and the encapsulation of the tubercle bacilli is unnecessary, as the enormous number of these special leucocytes are able to destroy and eliminate the bacilli so rapidly that the fibrosing and encapsulation is not necessary.

14. Instead of permanently encapsulating the bacilli, they are eliminated from the lungs as well as sputum, making a physiologic relief as well as symptomatic possible.

I believe that at least 95 per cent of all cases, stages and complications should be and can be made useful citizens and fully capable of their own support and that of their families, and live as long and as happily as if they had never had tuberculosis.

It will be seen that I consider, after making the above summary and demonstrations to you, that we have proven a specific for tuberculosis, as much as we have quinine for malaria, mercury for syphilis and anti-toxin for diphtheria.

I believe by this means and management proposed, we will and can eliminate tuber-

culosis as a great scourge, and make in a few years the world quite free from its ravages.

My idea is that the home, public and other schools are the places to begin to clean the United States of tuberculosis. Commence with the children, see that they are not only taught their lessons, but are also put in such good physical condition that they will never break down with tuberculosis. If we are able to cure the advanced cases I am showing you today, isn't it absurd to think we can't cure a child in its early stage. I have treated and relieved many children with tuberculosis. I know that electricity will make them grow and develop wonderfully as proven by the lamented Hurdman of Ann Arbor many years ago. X-ray will cure their young and tender lungs so fast that you will think you made a terrible mistake in the diagnosis.

My plan, if nothing better is developed, is to have the United States Board of Health in conjunction with the county, state and city boards arrange to have a tubercular department established in every city, situated so the suspicious tubercular and delicate children can be watched and treated by this method until they are cured while at school. They can be cured at this age easier, cheaper and better than at any other time of their history. It will not be necessary to segregate them from other children. In a few months, or a short time, they can be made as healthy, strong and well developed as any other of the children with whom they associate, and I venture the assertion that in one or two years the children who have been treated by this method for tuberculosis, will surpass the other children mentally and physically who have not been so treated. It must be remembered when these children are cured, they are not disseminating the germs at school, on the street and in their homes, nor will they be breaking down with tuberculosis and reach an early grave about the time they begin to draw good salaries, and are ready to take their place in the business world, but will be strong and vigorous, a pleasure

to their families and themselves and an asset to the state in which they live.

I consider under the method of which I have been talking that we have something definite and positive enough in its action to justify the Government in taking some steps to control and eliminate tuberculosis; and by these means we can make death from tuberculosis such a rarity that it will be a shock to the community.

These medical men who are looking after and taking care of tubercular children will soon become such adepts on tuberculosis and in their tubercular work that all of the surrounding community can soon take advantage of their skill and their will be no need of long trips to distant climates to get well of tuberculosis, as they can be sured at home.

By this method of treatment, I consider that our statistics should run about the following:

1. Recoveries in First Stage Cases should be 100 per cent.
2. Recoveries in Early Second State Cases should be 100 per cent.
3. Recoveries in all Second State Cases should be 95 per cent.
4. Recoveries in all Third Stage Cases with their complications should be 75 to 85 per cent.

On an average all cases, stages and complications between 90 and 95 per cent should be relieved to such an extent that they can be self-supporting, comfortable and live as long as if they had never had tuberculosis, and should never die of tuberculosis.

X-ray Treatment—Place the patient upon the X-ray table, lying flat upon his back. Lead protective coverings are placed over the head for the protection of the head and face, care being used with napkins, sufficiently thick, or something in the same way to prevent sparking from the lead to the patient. The lower abdomen and genitals should be protected also. Aluminum screens of at least 2mm. in thickness are used for the protection of the chest and parts to be treated. The

X-ray tube is then swung over the chest in a way to get the rays scattered over the entire shest as much as possible, with the center of the focus usually near the center of the chest. Have the anode of the tube from 12 to 14 inches distant from the patient, and put through the tube a current ranging from $1\frac{1}{2}$ to 3 ma., owing to the size and thickness of the patient, using from 5 to 7 in. parallel spark gap. A Coolidge Tube or the author's air cooled tube usually preferred. The seance should last usually ten minutes.

The light should be such that it will give you a slight illumination through the chest, but not enough for a first class fluoroscopic examination. We wish no fluoroscopic ray for treatment, as we wish the rays to be as dense as possible, so use no "cut-outs" as is sometimes in fluoroscopic work.

My method is to give one entire treatment through the front of the chest and the next treatment, two days later, is given through the back of the chest. Three X-ray treatments are usually given a week, that is on the lungs proper. That will leave three days upon which to give static electricity, or other forms of electricity, to be used in conjunction with the treatment.

Static Electricity—Electricity is given on the alternate days with X-ray. I use, usually as a routine procedure, the static brush discharge, as it is very stimulating, invigorating and splendid for the relief of aches, pains and soreness through the chest. It is easily given as follows:

Place the patient upon the insulated stool, sitting in a comfortable chair, on which there is no metal trimmings. The patient ordinarily holds the long brass rod, or "Shepherd's Crook", which is placed over one of the prime conductors of the machine, drawn as far back from contact with its fellow as possible to prevent sparking. Start the machine at a good speed, and then adjust one of the grounded chains to the other prime conductor. This puts the patient in a fine "static field" which is very perceptible. Then the "fly spatter" or other

electrode is attached to the other grounded chain and brought close enough to the back of the neck and shoulders to cause a rushing wind or breeze and the blue sparks to play upon the cervical spine and back of patient. This stream of electrical energy should be played over the cervical spine until it is well reddened, and usually perspiration is produced in the palms of the hands. If the spine is well reddened, then the electricity should be swayed to and fro over the parts of the chest to relieve any local soreness or irritating condition from which the patient complains.

There is nothing that will relieve pleurisy as quickly, as certainly and as easily as will this application when properly and patiently applied. It is very seldom that the author has to "belt-up" a chest for the relief of pleurisy. X-ray and electricity controls the pleuritic conditions so well, that a severe pleurisy is almost unknown.

To meet the different conditions as they arise in the treatment of many cases of tuberculosis, many other modalities of electrical energy can be used to advantage, as many variations of the high frequency currents can be used in the relief of pain and also for their eliminating and stimulating effects. In many early cases of tuberculosis diathermy can be used to a very great advantage, so can the sinusoidal and the currents of Darsenval and Oudin.

Ozone Inhalation—Ozone Inhalation is used as a routine measure from five to ten minutes daily. I am not particular about how the ozone is made; the main thing is to have it so proportioned with oil and air that it is not too irritating to the mucous membrane. There is a good machine put up by the Ozone Company of America and also by one or two other companies. The main thing is for the physician to learn to use and get the proper effect from the machine in his possession.

BELL MEMORIAL HOSPITAL CLINICS

Clinic of Dr. C. B. Francisco

CONGENITAL CLUB FOOT

The proper name for the ordinary congenital club foot is: Talipes Equino-Varus and this is the type we will discuss this morning as 75 per cent of all congenital deformities of the foot are of this type.

It is the most frequent congenital deformity, occurring a little more frequently in males than females and may be unilateral or bilateral.

This is the attitude of the foot; the heel is raised, and the foot is plantar flexed, the sole is adducted, that is, brought toward the middle line, and inverted; the internal border is elevated, shortened and curved on its self; the great toe markedly adducted and flexed (pigeon toe) and the small toes extended, the outer border of the foot is convex and in the direct weight bearing line.

The degree to which the deformity can be corrected depends upon the age of the patient, and the amount of contraction that exists in the resisting soft parts. The plantar fascia, tibial tendons and the tendo Achilles are shortened and offer the immediate resistance to correction and these structures must be dealt with first. The other factor to be considered is the actual bony deformity.

I would like to outline a plan for you to follow in the treatment of young infants with this deformity, and have you note the reasons for this method. Begin your treatment early, say at the age of 2 weeks in healthy babies, by stretching and moulding the foot into an over-corrected position and holding it in this position by a light plaster cast. It may require two or three changes of the cast to secure over-correction, but remember you must fully over-correct the foot if you are to obtain muscle balance and that is what you are trying to do at this stage, that is to stretch the shortened tissues and allow the stretched tissues to contract. After you have maintained the over-corrected position for six

weeks then remove the cast, and if there is a considerable tendency to relapse use a light splint at night to hold the foot in good position. The reason you remove your cast at this stage is to prevent atrophy. A child trebles its weight in the first year and the development of its extremities depends on their activity. Apparently there is as great an atrophy from disuse as there is from splints, so you instruct the mother to manipulate the foot two or three times a day and encourage the child to move its toes. When the child shows a tendency to stand on its foot, a brace should be applied, the best being a double bar celluloid foot form brace which insures the foot being held in proper position and therefore moulding the bones normally. The brace should be worn until the child stands properly on its feet and has full range of motion in all directions.

Now you see there are two principles involved in the treatment, First, muscle balance, and second, bony moulding, and the only thing that will secure muscle balance is using the muscles in normal relation to one another, and weight bearing is the only thing that will mould the bones properly, and you can mould children's bones into most any position that you hold them up to five years of age. The Chinese former practice of bandaging their girl babies' feet producing marked changes in their shape proves this statement.

In putting plaster casts on infants you should use a two inch plaster bandage, one that sets quickly and make the cast very light. It requires some practice and one is not always able to please himself with the result, and should not hesitate to try again until he succeeds in holding the foot as it should be. In making this splint, you put on a cast and remove it as soon as it is set, holding the foot in good position meanwhile; then send the cast to the brace makers instructing them to make a double bar celluloid foot form club foot brace with joint at the ankle that stops at right angle if the Achilles still seems a little short or a free joint if the foot dorsi flexes easily,

and a single outside bar, no joint at ankle, if it is to be used for a night splint.

You will observe that I have said nothing about operating on these cases, and a good rule for you to have is to never operate on a case that is less than a year old. There may be instances where this rule should not be observed, but in the ordinary case you will have no difficulty in correcting your soft tissues by stretching. One can say positively never do a bone operation for the cure of club foot in a child under one year of age. Usually one should not operate on the bones for this condition in children under 5 years of age for I have just told you that you can mould them up to that age. Certain it is that the end result will never be as good in the cases that are subjected to bony operations. In children over a year old with untreated or relapsed club feet, the principles are the same, but you have to divide your contracted soft parts, which you can do freely and sufficiently, to permit over-correction, and remember no foot is cured and will surely relapse unless you secure complete over-correction. It will be necessary to maintain this position for a period of from 3 to 6 months before applying the braces, allowing the children to walk on their casts as soon as they wish to, and keeping them in braces until they weight bear properly.

Once you have operated on a foot never allow it to relapse if you can possibly prevent it, for a relapsed club foot is much harder to cure than an untreated one. Therefore, when it is necessary to do a bone operation, take out a sufficient amount of bone to allow complete over-correction, and this is best judged by your external malleolus which must be permitted to come as far forward as the anterior border of the oscalecis. Tenotomies should be done subcutaneously to prevent the tendon adhering to the skin.

This case which is 4 months old, was first manipulated three weeks ago under an anesthetic. You will now observe that both feet can be placed in extreme over-correction rather easily. We will not give this

child ether again but will put the feet up in this position for another three weeks and then leave the cast off and instruct the mother to stretch the feet and encourage the child to kick about. Always remind the mother to watch the toes after a cast has been put on, to see that the circulation in them is normal. If the toes are white it means the circulation has been interfered with and unless it is restored they will soon get dark and in that case the cast should be removed at once.

There are several instances on record where gangrene has resulted, requiring amputation of the foot following the application of a cast which interfered with the circulation.

You see these toes are pink, and the baby has ceased crying which is a very clear indication that the cast is not too tight.

Now I hope you have a definite understanding about how to proceed in these cases and just remember that you must stick right to the foot until you have accomplished what you set out to do, namely, normal weight bearing and a normal range of motion which equals cured feet.

B

Clinic of Dr. Nelse F. Ockerbald, Department of Genitis-Urinary Surgery.

HEART BLOCK FROM ARSPHENAMINE

We have before us today a patient who has suffered two severe reactions following the intravenous administration of arsphenamine and who has come thru without apparent damage. This patient was referred by Dr. Curran's clinic for arsphenamine treatment on March 3rd, 1919. She is as you see a colored female, a widow aged 43 years and by occupation a cook. She had the following complaints; (1) Swelling of the fingers; (2) Spots on the body; (3) Loss of vision in one eye. She was given seven doses of 0.3 gram Arsenobenzol (Schamberg) as follows; March 3, 10, 21, 28, 31 and on April 4 and 7. These were followed by no reactions either immediate or delayed and the patient had been greatly benefitted by the treatment. On April 14 she was given the eighth dose of the same

size as the other seven preceding. This dose was taken out of a batch of arsphenamine that had been prepared for about twenty patients and this patient was among the first to be injected. There were no other reactions that day. Our rubber tubing attached to the gravity sets had been in use for some months. About five minutes following the injection of the arsphenamine she had an epileptiform seizure with tonic contractions, loss of consciousness, and total rigidity which was followed soon by profuse perspiration. She partly regained consciousness and began screaming, and complaining bitterly of pain in the lumbar region then lapsed into unconsciousness with marked stertorous breathing. At this time there was a definite air-hunger. At the beginning of the seizure, the pulse, which was of good volume and tension dropped from 76 to 26 beats per minute and remained at that point for 20 minutes after which it rather quickly regained the normal rate. She completely recovered after about 45 minutes, refused to remain in the Hospital over night and went home on the street car. She had no further reaction. She again presented herself at the clinic one week later and altho she was not intended to have any more arsphenamine treatments she was given another 0.3 gram of the same preparation as the week before. When I saw her she was having exactly the same type of reaction that she had seven days previously, except that the seizure lasted longer and the pulse dropped to a rate of 30 per minute for five minutes, then rose to 92 per minute. She felt ill for almost a week after this last reaction. During the first reaction she was given morphine with good results, during the second she was given 1 cc of epinephrine 1-1000 with no apparent result. There were no other reactions that day altho 25 arsphenamine treatments were given.

That this patient had a temporary heart block there is no doubt. The mechanism of the process is not so clear. Heart block has been observed following the use of Fowler's solution. The frequency of a phlebitis of the veins of the arm proves the

irritating character of arsenical compounds. The possibility of the arsenic acting on the bundle of His is entirely probable. We may have had a passing edema at the site of the bundle of His. Had this reaction happened on the first arsphenamine we might have suspected a syphilitic myocarditis. Much has been written on Salvarsan reactions of late and everything from the water to the tubing has been blamed for reactions. We have given nearly a thousand consecutive doses with but one rather mild reaction so the technique is not to blame. The drug did not affect adversely 43 other patients treated at the same time so the drug in itself was not to be blamed. We can only conclude then that this patient during the previous seven injections was extended beyond her limit of tolerance for the arsenical compound or that she may have been "sensitized" so to speak. We now know that the warning signal that the limit of tolerance has been reached is the itchy dermatitis on the wrists and forearms. This patient had no such disturbance.

Reactions are almost unknown in our clinic. We no longer give arsphenamine at 3 and 4 day intervals. We use only one brand of the drug and by experience this has proved beyond question the best.

R EPIDEMIC ENCEPHALITIS

By animal inoculation and cultural studies, Leo Loewe and Israal Strauss, New York (Journal A. M. A., May 15, 1920), investigated the nasopharyngeal washings and the cerebrospinal fluids of patients suffering from epidemic encephalitis. They report their results and point out their value in diagnosis. Two c.c. of a filtrate of the nasopharyngeal washings, containing thick mucopurulent discharge, from an epidemic encephalitis patient, were injected subdurally into a Macacus rhesus monkey. One week later the animal developed apathy, elevation of temperature, and paresis of both hind extremities. This condition persisted for eight days and then gradually disappeared. Lumbar puncture on the sixth day of the illness revealed clear fluid under increased pressure. There were 16 cells per cubic millimeter mostly lymphocytes. The nasopharyngeal washings from fourteen other patients with epidemic encephalitis were injected into a total of thirty rabbits. Twenty-five of these animals were

examined postmortem, fourteen showing the characteristic lesions to a greater or lesser extent. The lesions consist of meningitis with round cell infiltration, perivascular and adventitial infiltration with mononuclear cells, focal infiltration with round cells, and punctate hemorrhages with edema. These lesions were present singly, but most often combined. It required from one to fifteen days for the animals to succumb. Nine of the fourteen rabbits showing lesions were dead within four days. The short period usually required enhances the value of the test. The diagnosis was confirmed by animal inoculation in eleven of the fourteen nasopharyngeal washings tested, or 78 per cent. The method was of distinct practical value in two instances. Filtrates of nasopharyngeal washings from seventeen patients with epidemic encephalitis were cultivated on the kidney-ascitic fluid medium, with positive findings in eleven cases. In five instances the organism was recovered from the brains of animals injected with the virus of these nasal washings, and in three instances, from the brains of rabbits injected with the organisms isolated from these nasopharyngeal washings. Cerebrospinal fluids, drawn in sterile fashion from sixteen patients having epidemic encephalitis were injected intracranially into rabbits in amounts of from 0.25 to 1 c.c. Fifteen of the twenty-nine rabbits that died showed the characteristic microscopic lesions. Animal inoculation, therefore, served to confirm the diagnosis in twelve of the sixteen cases tested, or 75 per cent. Cerebrospinal fluids have yielded the filtrable micro-organism in eleven of the twenty spinal fluids cultivated. It was found in one case on direct smear of the sediment of the centrifugalized spinal fluid. These stains were carried in one instance as far as the eighth generation. The same organism was recovered from the brains of eight rabbits injected with the spinal fluid itself, and from the brains of four rabbits injected with the organism derived from these spinal fluids. The filtrate of nasopharyngeal washings from a patient with influenza complicated by bronchopneumonia and sinusitis was injected intracerebrally into a Macacus cynomolgus, with entirely negative results. Cerebrospinal fluids of four cases (brain abscess, brain tumor, psychasthenia and uremia) were inoculated into nine rabbits in amounts of from 0.25 to 1 c.c. The brains of the two animals that died showed no gross or microscopic lesions. Cultures were made of the cerebrospinal fluids in seven neurologic cases and one case of uremia with entirely negative results.

THE JOURNAL
of the
Kansas Medical Society

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Fads and Fad-Makers

In one of the current magazines there recently appeared a story describing a man who had conceived the idea of commercializing the tendency of the people to follow fads. He first created a fad which would lead the people, for instance, to demand a certain article of food, he reaped his reward.

We are all faddists to a greater or less degree, by compulsion if not by intention, for one who is out of fashion is soon likely to be out of business. It takes a courageous man to oppose the prevailing opinion of the classes or the masses. It sometimes becomes a question of endurance—if his opposition outlasts the fad he may come into his own again, but is more likely to be classed as a has-been even though the prevailing opinion may revert to that of his own holding.

There are at least a few fads for which the medical profession may be held responsible, some of them may possibly be considered as having a commercial value. It might even appear to a stranger to our traditional altruism that someone may have had the commercial foresight of the "fad-maker."

Some of the fads for which the medical profession may be held responsible have resulted from the effort to educate people along medical lines—not that this effort

is objectionable, on the other hand it is one of the most commendable undertakings in the history of our calling. But in some instances at least, the knowledge which the public has gained in so short a time has most naturally led to errors of judgment, misapplication, failure and consequent reversion to another extreme. It is not enough to know how to do the right thing in the right way, but one must know how to do it at the right time and in the right place. And this is one of the things we are not yet always prepared to teach the public. We can teach them some of the things we know, but we cannot teach them much of that we do not know. Fads are usually of short duration because they are based upon inaccurate or imperfect knowledge.

Fortunately for the people and for the medical profession there is now developing in this country a very promising deterrent agency against fads and fadmakers of the medical type. When the standardized hospital has become a generalized fact, fads of the medical man's making will become extinct. The standardized hospital will mean the elimination of uncertainty in diagnosis, in so far as proper equipment may aid in the definite determination of physical defects and functional derangements, and our present knowledge may enable us to interpret their relation to disease or arrange them in a logical sequence of cause and effect; for the standardized hospital must afford every facility for thorough and complete examination.

The standardized hospital will go considerably further and will insure that every member of the staff avail himself to the fullest extent of the facilities afforded him, for it will insist that a complete record be made of every case that enters the hospital. There will be a complete history; there will be a record of the physical findings, the laboratory findings, the roentgenologist's findings, etc., and there will be recorded the conclusions drawn from these findings, so that anyone who is interested may scrutinize and criticize the logic, the rationale, of the diagnosis. The record, however, is

not yet complete, for to it must be added the details of treatment and the results—the results of medical treatment, the findings and results of operations, or the postmortem findings.

Under such conditions it is safe to predict that fewer organs of the body will be sacrificed and fewer tissues of the body mutilated on suspicion. No structure will be assaulted until its complexity in the disease has been established. The ascendancy of conservative measures or radical measures will depend upon percentage of favorable results, and it is safe to predict that a small percentage of favorable results will not justify any procedure which may jeopardize the integrity of the body or its functions.

Fads of the medical type will of course continue to be born, to live their short span of life and die, but neither those of the innocent and nonproductive variety, nor those of intentional or incidental commercial value, will find many exponents in the medical profession.

The standardization of hospitals is a large undertaking. The movement was inaugurated with intelligent foresight and is being conducted with thoughtful judgment and careful consideration for the interests of the communities and hospitals involved. Far-reaching effects may be anticipated from its ultimate accomplishment. These results will accrue largely to the public benefit; to the hospitals, through the confidence which their greater efficiency will insure; and to the staffs, upon which the efficiency of the hospitals must depend.

R

ETCETERA

"All moral laws are compatible with good health. Health is the golden medium between exertion and overexertion. The law of sustained health is physical resistance against the encroachments of disease." V. E. Lawrence.

Williamson says: (Med. Clin. N. A., May) "My own judgment is that it is certainly very exceptional that we can make a diagnosis of Hodgkin's disease from the blood. I have never seen a case in which I thought

this could be done with any degree of certainty."

In Bootleg Days: 1920

"Bar, bar! Landlord—

Have you any rum?"

"Yes, sir; plenty. Only keep it mum! Some for the rascals, more for the drunks,

NONE for the doctors, sober men, or monks."—Evening Sun.

Calling attention to the discovery of bubonic plague in several American and Mexican gulf ports, and renewing his warning regarding the introduction of plague from Mediterranean ports which are known to be infected, Surgeon General Hugh S. Cumming today urged communities throughout the country and especially along the coast, to inaugurate rat-extermination and rat-proofing campaigns.

The U. S. Public Health Service has just published a new bulletin entitled "The Rat: Arguments for its Elimination and Methods for its Destruction." Copies may be obtained by addressing the U. S. Public Health Service, Washington, D. C.

Transfusion of Blood in Pernicious Anaemia

O. Seheel and O. Bang (Norsk Mag. for Laegevidenskaben, March, 1920) achieved success by the transfusion of large quantities of blood in a severe case of pernicious anaemia. The patient, a man aged 33, was admitted to hospital moribund. The red cells numbered 850,000, and the percentage of haemoglobin was 19. After 900 c. cm. of blood, taken from four persons and treated with sodium citrate, had been injected into a vein there was an immediate improvement. The red cells rose at once to over two millions, and later to over three millions. The patient, who had been very weak and dyspnoeic and only partially conscious, was up and about twelve days later.

Haynes (Brit. Med. Jr.) says: "I think the large majority of cases of epilepsy occurring in the young are due to syphilis either in the parent or in the grandparent. Epilepsy occurs most commonly in infancy and at puberty. Recurring 'convulsions' in infants are usually epileptic and may be cured by a course of mercury." "Epilepsy beginning later is curable provided the disease is at once treated with mercury." He prefers the mercury perchloride.

The books of the packing concerns have been almost worn out by different sets of examiners pawing over them. The investigators have shown that they sell for 100

cents that which costs them 98 cents. The margin is about 2 per cent. Can the work be done for less? Were the packers driven out and there was less complete utilization of by-products, would cattle men get more for their animals or consumers get their meat for less?—(N. Y. Tribune.)

The Anaphylactic Nature of Asthma

Pagniez (Rif. Med., February 14th, 1920 and Presse Med., No. 7, 1920) assumes that the true idiopathic asthma is due to a condition of anaphylaxis set up by various proteins in sensitized subjects. The particular protein concerned can sometimes be discovered by a cuti-reaction test, and the patient desensitized by a course of vaccines. Unfortunately a certain number of asthmatics do not appear to be sensitized or at any rate the particular protein to which they react cannot be discovered. On the other hand, some asthmatics have received much benefit from suitable vaccine treatment, relief being obtained for quite two years. At present the results obtained are uncertain. Cardiac, renal, and emphysematous asthma belong to a different group.

An Improvement

Doctor—You cough with much greater ease this morning.

Patient—I ought to; I have been practicing all night.—Medical Pickwick.

The Fifteenth Annual Meeting of the Medical Association of the Southwest will be held at Wichita, Kansas, September 27, 28 and 29. In accordance with instructions at the last annual meeting the 27th will be given up to a reunion of the Medical Officers who were called into active service during the Great War. This session will be a purely social one with a banquet in the evening.

Autohaemotherapy in Anaemia

Crespin and Athias (Bull. Soc. de Therap., March 10th, 1920) have treated cases of anaemia (in which administration of normal horse serum and other methods had failed) by subcutaneous injection of the patient's own blood. Considerable improvement occurred in forty-eight or even in twenty-four hours, with a moderate and sometimes considerable increase of the red cells and occasionally of the leucocytes. Only a small quantity of blood was required, namely 5 to 10 c. cm. in adults and 3 to 5 c. cm. in children. In most cases only a single injection was sufficient, and it was exceptional for a second or third to be needed. In the case of anaemic in-

fants whose blood could not be obtained, their mother's blood was injected. It is remarkable that this "homotherapy" as it was called, was only successful when the mother was also in a state of pronounced anaemia. In cases where the mother was plethoric no results were obtained; in explanation it is stated that the blood of anaemic persons contains active haemopoietic substances, the power of which is probably exalted by passage into the subcutaneous tissue.

The Blood Pressure in Pulmonary Tuberculosis

P. J. L. De Bloeme (Nederland, Tijdschr v. Geneesk, March 20th, 1920) examined the blood pressure by the auscultatory method with Riva-Rocci's instrument in 500 cases of pulmonary tuberculosis, and came to the following conclusions as regards its diagnostic and prognostic value: Cases with a blood pressure of 80 to 100 mm. could be recognized by other diagnostic methods, and estimation of the blood pressure was merely confirmatory. The cases of this kind which the writer saw died within six to twelve months, with the exception of a few patients who had a reading of 90 to 100 mm. (essential hypotonus). The most important group consisted of men who had a blood pressure of 100 to 110 mm. Sphygmomanometry in such cases was of value as the gravity of the condition was much more readily recognized by this than by other means. The most favorable cases were the patients of both sexes who had a reading of 110 to 150 mm. In individual cases the writer found that patients with low blood pressure were more liable to relapse than others. Those who had had a relapse showed a low blood pressure even after the general and local symptoms had subsided. Considerable improvements were accompanied by a rise of blood pressure. A distinct fall of blood pressure in a case in which the local process was apparently only advancing slowly indicated a more unfavorable course than might otherwise be supposed.

Thoracoplasty in Pulmonary Tuberculosis

Professor Saugman has recently published an account of the 40 patients on whom he has performed thoracoplasty operations at Vejlefjord Sanatorium. In all these cases the pulmonary disease was advanced, and owing to extensive pleural adhesions collapse of the lung by artificial pneumothorax was not feasible. The position, then, of these patients was, under ordinary circum-

stances hopeless. Yet, by adequate collapse of the most diseased lung by extensive extrapleural resection of ribs, Professor Saugmann was able to restore 13 out of the 40 patients not only to comparative health, but to a certain capacity for work. Another paper on this subject deals with the results achieved by Professor Bull in Christiana. In his first series of 11 cases the operation was fatal in 3. In his second series of 26 cases there was only one death from the operation. He attributes this great improvement in his immediate results to various changes in method, the most important being the performance of the operation in two stages instead of one. Of the 33 patients who survived the operation 7 died later from tuberculosis and one from influenzal pneumonia; 11 of the remaining were at work, were always free from fever, and their sputum no longer contained tubercle bacilli. They had also ceased to cough except when they had caught "colds". In 7 other patients the final result could not be stated, as less than a year had passed since the operation was performed; in several, however, tubercle bacilli had disappeared from the sputum, and other signs of improvement had been noted. Professor Bull believes, therefore, that several of them may ultimately be included among his "cures." It is an instructive fact that, though these two writers have worked independently, their results are strikingly concordant. They show that, roughly speaking, a third of the patients who undergo extrapleural thoracoplasty operations may expect a complete arrest of this disease, in spite of being in the last stages of pulmonary tuberculosis.—(British Med. Journal.)

In no one direction has the Council of Pharmacy and Chemistry made greater efforts than in its endeavors to secure the fullest co-operation of the various pharmaceutical houses. The difficulty has been, and always must be the fundamental antagonism between objectives that are largely commercial, on the one hand, and purely scientific on the other. Nevertheless, the Council has always believed that there is a possible middle ground wherein the interests of therapeutics would not be injured, but would go hand in hand with commercial development based on enlightened self-interest. The Council has practically the undivided support of manufacturers of medicinal chemicals; but pharmaceutical firms which find it profitable to promote specialties unscientific or ordinary mixtures of pharmaceutical or biologic products sold

under trade names—have not supported the Council. The methods of the pseudochemical companies, whose sales propaganda in the interests of unscientific nostrums with its attending damage to scientific medicine had led to the establishment of the Council, has found their lodgment in most of the pharmaceutical houses. Is it any wonder that such firms are antagonistic to the work of the Council? When the medical profession as a unit will support the Council in its work, then such firms will find it good business policy to market products which are eligible for New and Non-official Remedies, but not before. The Council, constituted of scientific men working without remuneration in the interest of scientific medicine and the medical profession, expects—and rightfully—the co-operation and support of that profession. What is needed is the active, sympathetic co-operation of physicians; the co-operation of pharmaceutical houses will follow as a matter of course (Jour. A. M. A., May 1, 1920, p. 1234).

The exhibit of the A. M. A. Chemical Laboratory at the recent New Orleans session of the A. M. A. contained a card comparing the cost of drugs sold under proprietary and non-proprietary names. The following list compared the wholesale price per ounce of drugs sold under protected (proprietary) names with the same drug sold under a common (non-proprietary) name: Aspirin-Bayer, \$0.85; acetylsalicylic acid, \$0.16. Phenacetin, \$0.65; acetphenetidin, \$0.27. Atophan, \$3.50; einchophen, \$2.00. Kelene (10 gm.), \$0.56; ethyl chloride (10 gm.), \$0.45. Duotal, \$1.90; guaiacol carbonate, \$0.80; Urotropin, \$0.60; hexamethylenamine, \$0.21. Sulphonal, \$1.70; sulphonmethane, \$0.80. Trional, \$1.90; sulphonethyl-methane, \$1.00. Diuretin, \$1.75; theobromine-sodium salicylate, \$0.70; aristol, \$1.80; thymol iodide, \$1.00. Economy as well as scientific prescribing demands the use of non-proprietary names whenever possible (Jour. A. M. A., May 22, 1920, p. 1473).

For some time manufacturers have urged substitutes for tincture of iodin, claiming that the substitutes were free from the undesirable properties of the tincture and at the same time possessed special virtues which the tincture could not possess. More recently, attention has been directed to the administration of iodin in the form of vapor. Luckhardt reports that they are rapidly and completely absorbed. It was found that the administration of iodin through the

respiratory passages even in small quantities is fraught with great danger. Such administration induces dyspnea, and when it is given in large quantities, acute and fatal pulmonary edema ensues within twenty-four hours. When respiratory disorders are present at the time of the administration the fatal edema supervenes very quickly (Jour. A. M. A., May 29, 1920, p. 1521).

Hostetter's Celebrated Stomach Bitters is declared to contain 25 per cent of alcohol. Analysis in the past have shown that the alcohol content has varied widely at different times, the amount having never been less than 25 per cent by volume, but sometimes as high as 43 per cent. A recent analysis by the A. M. A. chemists showed 24.72 per cent of alcohol by volume, small quantities of cinchona alkaloids (about 3-4 grain per fluidounce) and no other therapeutically active ingredients in appreciable quantities. Six fluidounces of the preparation (6 doses) were dealcoholized, the solution evaporated, the residue mixed with milk sugar, the mixture placed in capsules and the capsules swallowed at one dose by a healthy man. No effects were noted. It is evident that alcohol is by far the most active ingredient in Hostetter's Stomach Bitters. The analysis failed to reveal the presence of any drugs in quantities that would prevent the preparation's being used as a beverage (Jour. A. M. A., May 28, 1920, p. 1534).

Another Sanatorium for Tuberculosis Soldiers

According to an announcement made by Surgeon General Hugh S. Cumming, the magnificent tuberculosis sanatorium heretofore operated by the Army authorities at Fort Bayard, New Mexico, has just been transferred to the U. S. Public Health Service, and will soon be available for treating discharged, disabled soldiers. Splendidly located, not far from Silver City, and conveniently accessible on the Santa Fe railroad, this sanatorium has long been the pride of the Army. The climate is almost ideal, in that it permits outdoor life for a large part of the year.

The Fort Bayard Sanatorium will provide the Public Health Service with 1,000 additional beds to care for its tuberculous patients. The present sanatorium at Deming will be held in reserve, specially for winter use.

The National Research Council, a co-operative organization of leading scientific and

technical men of the country for the promotion of scientific research and the application and dissemination of scientific knowledge for the benefit of the national welfare, has elected the following officers for the year beginning July 1, 1920: Chairman, H. A. Bumstead, professor of physics and director of the Sloane physical laboratory, Yale University; First Vice Chairman, C. D. Walcott, president of the National Academy of Sciences and Secretary of the Smithsonian Institution; Second Vice Chairman, Gano Dunn, president of the J. G. White Engineering Corporation, New York; Third Vice Chairman, R. A. Millikan, professor of physics, University of Chicago; permanent secretary, Vernon Kellogg, professor of biology, Stanford University; Treasurer, F. L. Ransome, treasurer of the National Academy of Sciences.

The Council was organized in 1916 under the auspices of the National Academy of Sciences to mobilize the scientific resources of America for work on war problems, and reorganized in 1918 by an executive order of the President on a permanent peace time basis. Although co-operating with various government scientific bureaus it is not controlled or supported by the government. It has recently received an endowment of \$5,000,000 from the Carnegie Corporation, part of which is to be expended for the erection of a suitable building in Washington for the joint use of the Council and the National Academy of Sciences. Other gifts have been made to it for the carrying out of specific scientific researches under its direction.

To encourage study of the means for the prevention and cure of tuberculosis, the Hennepin County Tuberculosis Association of Minneapolis, Minn., announces that it has set aside a fund for the support of a tuberculosis research fellowship in the Graduate School of the University of Minnesota. The candidate for the fellowship must be a graduate of a Class A medical college. He will be expected to devote himself to research in some problem concerned with the causes, prevention, or cure of tuberculosis. No teaching or other service will be required. The fellowship yields \$750 the first year and progressively increasing amounts to be appropriated for the second and third years as conditions warrant. Inquiries and requests for application blanks should be addressed to the Dean of the Graduate College, University of Minnesota, Minneapolis, Minn.

Dr. S. Griffith Davis, of the Research Committee of the National Anaesthesia Research Society, advises that the University of Maryland, which several years ago created a separate department of anaesthesia and put him in charge with the title of associate professor, has now realized the importance of the work and given him a full professorship. So far as records are available, this is the first professorship of anaesthesia to be created in the United States. Dr. Davis ventures to hope that other schools will soon follow the example set by the University of Maryland.

For some years the belief has been gaining ground that leprosy could be cured, and encouraging progress was made by several investigators. The starting point for this study was the observation that now and then the course of the disease appeared to be favorably influenced by treatment with Chaulmoogra oil. The treatment, however, was attended with many difficulties and could not be carried out in all cases. At this point the Public Health Service enlisted the co-operation of Prof. L. E. Dean, head of the chemical department of the College of Hawaii, and president of that institution, suggesting that attempts be made either to isolate the active constituent of his drug or to devise means for making its continued administration feasible. The latter has been accomplished by preparing what is known as an "ethyl ester" from the Chaulmoogra oil. The treatment has been carried on at the Leprosy Investigation Station at Kalihi, Hawaii, the work being directed by Dr. J. T. McDonald, director of the station. The results of the treatment thus far have been so satisfactory that lepers come willingly for treatment, a recent inspection by Hawaiian health authorities failing to disclose a single secreted case of leprosy. Following a course of treatment, extending over about a year, 48 lepers, treated according to the new method, were paroled in October, 1919. Up to now they have remained free from disease. At the present time the treatment has been administered only at the receiving station, but it is hoped to provide facilities for the treating also of lepers in the leper colony at Molokai.

 R

Fables for the Kansas Doctor

BY RENNIG ADE

Once upon a time there was a Doctor who had plugged along for a great many years laying up a pittance for old age and

guarding his practice with a jealous eye.

At first he had confided to his wife he would be content and ready to retire if he ever could get ten thousand dollars ahead. This was in the pre-war days of ten-cent beef steak with a piece of liver free, and one-ninety-eight shoes.

By dint of economy and self denial he attained his goal, and in a patriotic moment invested it in Government bonds, as being safe and the rate of interest enticing.

This then was the psychological moment to which he had looked forward when he could sit back on his haunches and yawn at the proletariat as it trudged by.

However, before formally relinquishing his practice he decided to sort of check things up. The first rude shock he received was when the assessor came along and assessed his bond, as an old state law permits in Kansas. This is usually avoided by holding up the right hand and swearing that no bonds have been purchased, "So help me God." The excuse for this law being it prevents people from converting their cash into bonds, and then reselling the bonds after the assessor has come and gone.

No tender-hearted individual should ever take the job of the assessor, as the tales of woe he hears would unnerve the hardiest. In our town there was a Retired Farmer with 800 acres of bottom land who used to speak so feelingly to the assessor of the H. C. L. they would both get to crying and finally end up by the assessor being out a huge chew of tobacco, and the R. F. forgetting to list three-fourths of his personal property.

As the local city tax was three per cent, and the bonds drew three and one-half, the Doctor realized one-half per cent net on his investment which amounted to fifty dollars. This carefully invested would buy two pairs of shoes, four potatoes, and a small slab of bacon.

Plans for retiring were dismissed and the goal reset at five hundred thousand dollars; this sum being considered sufficient to keep a frugal family with only one child to educate.

Later when he decided to sell the bonds and put the money in farm mortgages, he found the former quoted at \$84 and going down, and 2400 more patriots being put on the pay roll at Washington. He couldn't see why stopping the war was so much more expensive than running one, and being no politician never could hope to understand. Clothes kept going up relatively, indecently, and also in price. Some said it was the war, some said the Gulf Stream, while others maintained it was the high cost of wool. Daughter Anna, who was at college and studying economics, had ideas which she thought would materially decrease the H. C. L. She had been rushed by two Sororities on account of the way she wore her hair and danced the "crocodile crawl." She thought it would be a wise plan to keep a sheep and a calf and raise their own wool and calf skins for shoes. When it was explained that calves that are skinned too frequently suffer from cold and fail to make a good growth she abandoned the idea, went to her room and had a good cry.

She had several good cries every day, which with her music and dancing kept her so busy she had no time to help with the cooking and dish washing. However, mother managed to keep things going, and by staying home from church got up excellent Sunday dinners for the pimply-faced mushrooms sister would bring home and sing wiggly, squirmy melodies to all afternoon. Dad bolted from the house on the second verse of one of these classics, as he said it reminded him of a place he was in years ago that was raided by the Vice Squad. Every few months Anna gladdened the home by a brief visit, leaving in her wake stockings to be mended and some illy-concealed cork tips.

However eugenically she was all right, and no fears were felt for her ultimate recovery. True, her mother was not sufficiently risque or modern to get the point of view, but solaced herself with the conviction there must be one even if she was too old-fashioned to rise to it.

Seeing the impossibility of reaching the

desired goal, Dad wisely decided, now that he was at his best mentally, he would jump into the harness with renewed vigor and make his work his pleasure instead of a daily grind. In order to do this it became necessary to acquaint himself with the latest developments along his lines. By means of post graduate work, diligent study and judiciously selected books he soon became an authority in his section of the country, and was often called in consultation. This pleased him greatly, and incidentally fattened his batting average at the bank. Daughter Anna was able to finish her school work, and vamped successfully for two seasons afterwards, marrying a shoe salesman in one of the local stores, and doing light housekeeping in a cottage next to her mother's. In due time she became president of the Mothers Club, and had her baby's picture in the Ladies Home Journal underneath the signed caption "Parental Precociousness Provocative of Post-Natal Perspicacity." This was read before the Portia Club, and copied by the home paper with comments by the society editress, who also made all the trains.

All of which goes to prove Anna was bound to get her stride sooner or later.

The Doctor took great pleasure in his grand-children and in his professional work, and forgot that anybody ever retired.

Moral—The live ones don't.

R

COMMENTS

BY THE PRODIGAL

INSANUS.

History tells us that the first hospital for the insane was established in Jerusalem, A. D. 491. It was a well settled belief at that time and from the beginning of the Christian era up to and including the twelfth century that the insane were possessed of a devil or devils. The Great Physician is reported to have believed in them. But the beginning of the Christian era marks the transitional period or new thought of the demon diagnosis of insanity.

To Pinell, in 1793, is the credit given

for the treatment of the insane, both from a humanitarian and from a scientific point of view. It took many centuries for the human mind to learn that insanity is a brain disease and to get away from the demon theory. Not only one devil possessing the unfortunate one, but legions of them—about 4000 jumped him en masse in epilepsy.

Such a belief and practice looks strange to the present generation and would be tabooed and unaccountable to us, if we could show a clean bill of entry. This we cannot do. The probability is that we are in advance of the ancients in locating the disease and in the temporary treatment of its cause, but as yet insanity is on the increase and the authorities provide increased asylum or hospital facilities for the insane, for the same reason that our government licensed saloons and built more jails to accommodate the criminals the saloons furnished.

We look upon the devil diagnosis of insanity by the ancients with pity for their ignorance and censure them for their harsh and beastly treatment and care of the insane. Those primitive, brutal methods of caring for and treating the insane had some redeeming features. There was no inducement to feign insanity, no malingering, no valumes of hypo-psycyological questions were extant in those days. Emotional insanity murder was not encouraged.

When symptoms of unsoundness of mind began to ooze out of a fellow he was probably chained to a post in the common for observation. If there were further developments, whipping was the potent remedy—to beat the devil out of him. Murder, under the emotional insanity plea, brought no flowers to the criminal. There was no bevy of empties sitting around in the corridors of the jails, waving recognition to the incarcerated criminal, with brine oozing from their calf like opties, filling all the receptacles. The propagation of his kind was not encouraged, nor cultivated in those days. The same care and treatment was given to derelicts, imbeciles, and defectives in general.

These remarks are not made with a view

of approving or encouraging a repetition of the wrong method and treatment applied to do the right thing—to cure and prevent insanity and defectives, which it had a tendency to do, but as a matter of history in comparing present day methods in lessening degeneracy.

We are all wise to an event after it occurs, but the study of history should make us wise to an event before it occurs. The nineteenth and twentieth century care and treatment of undesirables, in our aesthetic civilization, appears to be cultivating and encouraging "The unbalanced mind." Aside from the pseudo—sympathetic sentimentality of the mass, science exerts itself to the limit to prolong the life of the unfit. A degenerate has especial care and his organs of procreation are protected as sacred, that he may beget his kind. A locoed infant is nurtured to manhood that he may duplicate himself.

The vegetative function, or procreative function, when properly exercised leads to health and peoples the earth, but like every good thing when abused brings disease and death. The venereal abuse has its airing now. The medical profession has brought the world face to face with old ral. It has done away with the so-called private diseases and made the happy possessor a public nuisance. This venereal devil of insanity and degeneracy is now on the rocks of public conscience and will get its just reward.

Most of the other causes of insanity, degeneracy and deformity are known and the problem can be worked out with reasonable satisfaction by the medical profession.

It is said that the advance in medicine marks the progress of civilization. A transitional period in civilization is here—in prevention. It is in the keeping of the medicai man. He has acquired enough facts to readjust the groundwork of a higher, cleaner, better civilization. The doctor who does not do his part in this great human uplift should be ostracised. Sympathy, sentiment and seerecy, when guided by reason and judgment are an asset, otherwise they are a liability. The medical man from his train-

ing is better prepared to speed the wheel of progress than any other.

The doctor must teach, first by example, cleanliness of person, dress, habits and language. He must live a clean life and precept will be easy. He must use his knowledge and power energetically in preventive, reparative and constructive medicine: Preventive, in lines along sensible humane efforts in lessening the crop of demented—encouraging every effort for their comfort, but rendering them non-productive. Reparative, in curing nature's defects or omissions so far as can be done, but where nature has clearly failed to function properly, take no chances. Constructive, exercising the power of control and direction in laying a foundation for the next generation to build on.

Thus doing away with all brutal methods practiced by the ancients. Doing the right thing in the right way. Conserving the life that now is and caring for the unfortunate humanely. Protecting society from emotional criminals and degenerates. Improving the morale as well as the morals of society. Setting man ahead several holes nearer the millenial goal of the higher life.

SLANG

"Originally the word **slang** meant a cant of thieves, gypsies, etc. More recently it meant new words of the vagrant or illiterate classes or ordinary words or phrases used in an arbitrary sense; popular cant."

The use of slang is more or less anathematized by the erudite. It is the same in morals by those who are so straight that they lean back. Slang when reduced to billingsgate is vulgar and debasing, but slang is the food upon which language grows. It is one of the sources of supply of new words and phrases—these new words and phrases become a part and are incorporated into a language when they express a thought concisely and save words. They may sound harsh and inelegant to the critical ear at first, but time mellows and usage softens and approves them and the new growth sticks.

Each profession has its own language.

New words are coined daily and old words become obsolete. Medicine is no exception to the rule. In fact, it leads in coinage and obsoletism. The doctor who speaks of disease as arising **de novo** is classed with the ancients. A physician who keeps posted in the medical nomenclature of today must read the newspapers, magazines, weekly and monthly medical journals—the dictionary is too slow. However, the dictionary is the rudder to guide the direction language is to take; and instead of incorporating new words which have been used for a decade or for several years, at least, as formerly, they are beginning to class words of the street right along with the high-brow stuff. These words seem to be a by-product of Americanized English and have become a part of our language, as evidenced by the following words contained in the latest dictionaries. **Blimp**, an observation balloon. **Cootie**, a trench louse. **Whizz-bang**, any medium sized high explosive German shell. Large shells are Crumps, smaller ones are **Pip-squeaks**. **Gippo**, soup, bacon or grease.

A word is the sign of an idea. An idea is a mental conception. The word or phrase by which this mental conception can be conveyed to another in the most condensed, concise, comprehendable, elegant form is the word or phrase to be used. It will be used as soon as it is coined. It has the punch and it will stick. If devoid of these qualities it will meet its fate and oblivion will be its epitaph.

The gist is, if a man has such a word or phrase lolling around in the back of his head, he should let it out of his system.

Moral—Don't let an aesthetic tie hold you down.

R SOCIETIES

Seventh District Society

The Medical Society of the Seventh District met in Hutchinson Thursday, June 19. There was an afternoon and evening session and a good attendance.

The following program was carried out in full:

Call to order, Dr. H. B. Pope, President, Kingman, Kansas.

"Fractures", Dr. C. Klippel, Hutchinson, Kansas.

"Syphilis as a Factor in Diagnosis," Dr. W. A. Baker, Leavenworth, Kansas.

"Carcinoma of the Prostate," Dr. E. E. Morrison, Great Bend, Kansas.

"Ottie Meningitis," Dr. E. M. Seydell, Wichita, Kansas.

"Discussion of Some Bone Lesions," (Illustrated), Dr. T. G. Orr, Kansas City, Missouri, Professor of Surgery, Kansas University School of Medicine, Rosedale, Kan.

Case Reports—Reports limited to five minutes and one case from each member present. Discussion limited to three minutes for each member present.

"Tuberculosis," (Illustrated), Dr. Jefferson D. Gibson, Denver, Colorado.

"Anteflexion of the Uterus and Its Treatment," Dr. Harry Haskins, Kingman, Kansas.

Shawnee County Medical Society

The regular monthly meeting of the Shawnee County Medical Society, was held Monday evening, June 7th, at the Chamber of Commerce Rooms, with an attendance of about 35 of the Doctors.

E. D. McKeever, Attorney for the Medical Defense Board of the State Society, gave a very interesting discussion of his work in representing the Doctors in case of threatened or actual suits.

Four new applicants were admitted to membership.

At the July meeting, Dr. C. B. Francisco, of Kansas City will read a paper. Out of town Doctors are invited.

E. G. Brown, Secretary.

Kansas State Nurses' Association

The ninth annual meeting of the Kansas State Nurses' Association was held in Wichita May 21 and 22. It was a record meeting for attendance and interest. The assembly was addressed by Miss Adda Eldridge of Rochester, N. Y. One hundred dollars was pledged by the association for the hospital at Bordeaux, France. Plans were developed for completing the organization of nurses in every district in the state. Only alumnae from accredited training schools and hospitals are admitted to membership.

A Private Duty Section was organized and the following price list was adopted by this section and approved by the association.

The Kansas State Nurses' Association
Private Duty Section

NURSING RATES

(To be used as a guide)

Approved by The Kansas State Nurses' Association

General Medical and Surgical Work;	
one nurse on the case, per week....	\$35.00
General Medical and Surgical Work;	
two nurses on case, working twelve hours each, per week.....	30.00

If case lasts less than a week then	
each nurse, per day.....	5.00

Prostatectomies, per week.....	40.00
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Contagious Diseases, per week.....	40.00
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Obstetrical Cases, per week.....	40.00
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While waiting for Obstetrical Cases, per week	35.00
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Tonsillectomies, per day.....	6.00
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Small pox and Meningitis, per week	50.00
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For two nurses on case, each nurse, per week.....	35.00
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Nervous, Mental, Alcoholic and Drug Addicts, per week.....	45.00
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Relief Work, each twelve hours....	5.00
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Hourly Nursing, first hour.....	1.00
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Hourly Nursing, each additional hour	.50
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For each additional patient, per week, extra	10.00
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"Flu." Pneumonia and Typhoid Fever are classed with Contagious and Infectious Diseases.

Rates to Clergymen, Physicians and Nurses optional with nurse in attendance.

Traveling expenses to be paid by employer.

The R. N. should be relieved for six consecutive hours' sleep and two additional hours' recreation out of each twenty-four hours.

The following officers were elected for the ensuing year: President, W. Pearl Martin, R. N., Topeka; 1st Vice President, Charlotte Briggs, R. N., Hutchinson; 2nd Vice President, Mrs. C. C. Bailey, R. N., Topeka; Treasurer, Caroline Barkemeyer, R. N., Halstead; Secretary, Mrs. V. R. Saylor, R. N. Hutchinson. Directors: Sister Catherine Voth, R. N., Newton; Mrs. A. R. O'Keefe, R. N. Wichita; Sister Mary Helena, R. N., Salina; Miss Ethel Eastings, R. N., Kansas City; Miss Grace Scott, R. N., Rosedale; Miss Mary Collins, R. N., Winfield.

The Western Electro-Therapeutic Association

At the annual meeting in Kansas City,

May 27-28, the following officers were elected for the ensuing year:

President—Dr. B. B. Grover, Re-elected.

First Vice President—Dr. S. Grover Burnett, Kansas City.

Second Vice President—Dr. H. W. Nye, Osborne, Kansas.

Treasurer—Dr. Chas. Keown, Re-elected, Independence, Mo.

Secretary—Dr. Chas. Ward Fassett, Kansas City, (3 years).

Registrar—Dr. E. A. Nelson, Re-elected, Phillipsburg, Kansas.

Trustees, two years, Dr. W. P. Patterson and Dr. O. U. Need.

The next meeting will be held in Kansas City in May, 1921.

Treasury Department—Bureau of the Public Health Service—Washington

Medical Officers, U. S. Public Health Service and others concerned:

Your attention is invited to the extensive exploitation through advertisements in professional journals and otherwise of various arsenic preparations which are not related to the arsphenamine group. The preparations referred to are sold with claims in regard to their value in the treatment of syphilis, which are unwarranted.

In the opinion of this office it is the interest of all concerned that the subcutaneous, intramuscular or intravenous use of arsenic in the treatment of syphilis be confined to preparations of the arsphenamine group as these agents are of established value and are produced under the regulations of the Public Health Service. The following firms are now licensed for the manufacture of arsphenamine and neo-arsphenamine:

Dermatological Research Laboratories,
1720 Lombard Street,
Philadelphia, Pa.

H. A. Metz Laboratories,

122 Hudson Street,
New York, N. Y.

Diarsenol Co., Inc.,
Buffalo, N. Y.

Takamine Laboratories,
Clifton, N. J.

The Lowy Laboratory, of Newark, N. J., has been granted a license to prepare a stable solution of arsphenamine.

It is not the desire of the Bureau to limit clinicians in the choice of agents of recognized worth but in the case of arsenic preparations, not members of the arsphenamine group, the available evidence indicates that their routine use is inadvisable in the treatment of syphilis. If it is desired to use any of these preparations in a purely experimen-

tal way previous authority from the Bureau should be secured. Applications for this authority should be accompanied by a statement as to the composition of the drug including the structural formula and the reason for its use. All information available on the value of the preparation should be forwarded.

Receipt of this circular should be acknowledged and marked "V. D. Division".

H. S. Cumming,
Surgeon General.

R

To the Physicians of Kansas:

The Wassermann Laboratory now at Rosedale, and the Diagnostic Laboratory at Topeka, are being combined with headquarters at Topeka. No more specimens should be sent to Rosedale after June 26th.

The new Public Health Laboratory at Topeka will be ready to receive blood specimens after July 15th.

Specimens of suspected diphtheria and tuberculosis, and blood specimens for the Weidal reaction will be received by our diagnostic laboratory at Topeka as usual.

After July 15th all specimens should be mailed, postage paid, to

The Public Health Laboratory,
Topeka, Kansas.

Dr. Kenneth F. Maxey, of the International Health Board is the new Director in charge of the combined laboratories.

Very truly yours,

S. J. CRUMBINE, M. D.,
Secretary and Executive Officer.

R BOOKS

The Surgical Clinics of Chicago

Volume IV Number II (April, 1920). Octavo of 222 pages, 79 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Published Bi-Monthly. Price per year: Paper \$12.00; Cloth \$16.00.

One of the reports in Surgical Clinics for April is by Carl B. Davis who presents several cases of cervical rib and gives an extensive discussion of the subject. David C. Straus has a clinic on subdiaphragmatic abscess with transpleural drainage. Roy L. Moodie has a very interesting well illustrated article on "Primitive Surgery in Ancient Egypt." In addition to these there are clinics by Ochsner, Kretschmer, Moorhead, Watson, MacKechnie, Bevan, McWhorter, Parker, Speed, Eisendrath, Gatewood, Cornell, Dyas.

Medical Clinics of North America

Volume III Number 6 (Chicago Number, May, 1920.) By Chicago Internists. Octavo of 286 pages with 18 illustrations and complete index to

Volume 3, Philadelphia and London 1920. W. B. Saunders Company. Issued serially, one volume every other month. Paper \$12.00; Cloth \$16.00 net. Consisting of six numbers per clinic year.

It is difficult to point out one of the clinical reports in the May number of the Medical Clinics which deserves more particular mention than others. Perhaps the clinic by Abt and the symposium from his department should be mentioned because of its very general interest. Williamson has a very interesting clinic on lymphosarcoma of the neck and another one on pernicious anemia with extreme dropsy. Hess presents a paper on the care of premature infants that deserves careful study. Byfield's paper on the most important causes of errors in diagnosis will find favor with almost every careful practitioner.

The Treatment of Wounds of Lung and Pleura

based on a study of the mechanic and physiology of the thorax. Artificial Pneumo-thorax—Thoracentesis—Treatment of Empyema by Professor Eugenio Morelli, Assistant in the Medical Clinic of the Royal University of Pavia, Maggiori Medico, Field Hospital No. 79. Translated from the Italian by Lincoln Davis, formerly Lieutenant Colonel M. C., U. S. A., and Frederick G. Irving, formerly Major M. C., U. S. A. Published by W. M. Leonard, Boston.

Morelli adapted to the treatment of wounds of the lung and pleura the principles which had been developed by Murphy in this country and by Forlanini in Italy in the therapeutic application of pneumothorax. In his experience with war wounds of the chest Morelli reached the conclusion that immediate intervention was justified in these wounds of the lung and pleura. The author gives in ample detail his methods of procedure in the various conditions met with. His results seem to have demonstrated the soundness of his judgment and the efficiency of his methods.

Principles and Practice of Infant Feeding.

by Julius H. Hess, M. D. Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; Chief of Pediatric staff Cook County, Michael Reece and Englewood Hospitals, etc., second revised edition. Published by F. A. Davis Company, Philadelphia and London. Price \$2.50.

Under general considerations the author discusses the anatomy of the digestive tract and its physiology, metabolism in infants, composition of milk, milk digestion, bacteria of the digestive tract, their significance and influence of the diet on intestinal flora. Then under the general head of nursing he discusses all the disturbances arising in the breast fed infant. Under artificial feeding he discusses the various foods and meth-

ods of feeding. In another section is described the various nutritional disturbances in artificially fed infants. The appendix contains practically all the other technical details connected with the subject.

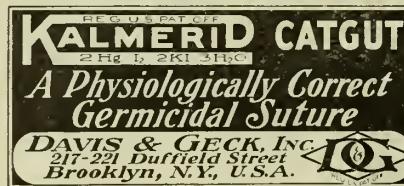
Simplified Infant Feeding, With Eighty Illustrative Cases,

by Roger H. Dennett, B. S. M. D. Associate Professor of Diseases of children, New York Post Graduate Medical School; Attending Physician of the Children's Department, New York Post Graduate Hospital; Asst. Attending Physician at the Willard Parker Hospital and Pediatrician to the New York Lying-In Hospital. With fourteen illustrations second edition revised and enlarged. Published by J. B. Lippincott Company, Philadelphia and London.

The author has not attempted to review the literature on infant feeding but has produced a practical instructive volume for the practitioners. The second edition has brought the work more completely up to date, necessitating the addition of considerable new matter. Among the subjects included in this edition are dry milk, acidosis, salts of milk, and the hypertonic infant. The chapter on diarrhoea has also been revised.

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FOR SALE—One Betz Enamelled Operating Table; good condition; all parts attached. Price, \$15.00. Address M. X, care Journal.



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JNO. H. MCKAY, Med. Dir.

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THE JOURNAL of The Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, AUGUST, 1920.

No. 8

Obstetrical Experiences of the Country Physician

O. E. STEVENSON, M. D.
LABETTE

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

The physician in general practice must, of necessity do more or less obstetrics. Primarily our obstetrical knowledge was obtained as an under graduate and hospital interne. Obstetrics is, probably, the poorest taught subject in the average medical school. The graduate of today has had opportunity to deliver from six to twelve women, which, we know, gives him only a superficial knowledge of the subject.

In this day of progress and scientific medicine, the act of becoming a mother remains as deadly for the average woman as it was before the discovery of anesthetics, and the introduction of antiseptic methods. In the past thirty years deaths from many diseases have been cut to a fraction of their former toll. Tuberculosis, pneumonia, diphtheria, and typhoid fever all show a marked decrease. In reviewing the family histories of five thousand applicants for life insurance, it has been shown that one man in every seventeen, who applies for life insurance, has lost either a mother or a sister from the immediate effects of child birth. Statistics show that grouping all women of child bearing age together, tuberculosis alone is more deadly than child birth. But in the country where we do not have the ignorant foreign and tenement population among whom tuberculosis is so deadly, child birth leaps to the front. It is the duty of every physician, who undertakes to confine a

woman to give her the best of his skill. We are all inclined to believe that because, in our practice, we rarely have puerperal sepsis, that deaths from sepsis are decreasing. Statistics show that the ratio of maternal deaths per one thousand live births in 1910 was 6.5, that is six and five-tenths mothers died for every one thousand live births in the registration area. In 1916 it was 6.6, about stationary. What can we do to improve our asepsis, skill and care in handling these cases?

The people must be informed regarding the dangers from the lack of surgical cleanliness and reasonable skill in the lying-in room.

This paper is an attempt to tell, in a simple manner of some of the difficult labor cases that occurred in the practice of a country doctor, and to recite the lessons learned therefrom. Where we were able to carry our women through the entire period of pregnancy, we have had few complications of the puerperal state. Early in pregnancy a physical examination is made, including the examination of the heart, lungs, abdomen, the urine, and the taking of the blood pressure. The patient is given some instruction in the hygiene of maternity, and other necessary instructions. Most of my grief has been among those patients whom I have not seen until they were in labor. It might be well to review a case of normal labor as conducted in the average country home, where the surroundings are not always ideal. My first duty on reaching the patient, is to satisfy myself, that she is actually in labor. Inquiry is made for the the usual phenomena of beginning labor,

the time when the pains began, and their character, strength, and frequency.

If the labor is in actual progress, a systematic external and internal examination is made. The general object being to determine certain details which pertain to the labor. The abdominal examination, determines whether the child is living, what is the presentation, and position. The most distinctive sign of head presentations is to be found in the recognition of the head by deep palpation behind the symphysis. The diagnosis should be checked by ascertaining the absence of the signs characteristic of the head at the fundus. In breech presentations the attention is first arrested by the absence of the transverse check, due to the head behind the symphysis. One can usually recognize the head at the fundus.

Diagnosis of Position by Palpation:—The hands are placed along the sides of the uterus and make gentle but deep pressure toward each other, that is, with the uterus and child directly between the palms, in this effort, we estimate the relative resistance afforded by the right and left sides, of the uterus, the flat, firm back of the child usually presenting a resistance to pressure that is markedly greater than of the yielding abdomen, and the movable limbs; the palmar surface of the hands should be moved gently up and down the uterine wall, in endeavoring to recognize the irregularities of the fetal limbs.

Internal Examination:—In my internal examination I usually avail myself of the extra length of the middle finger, by employing two fingers in all examinations. The vulva being cleansed, the hand having been disinfected and annointed with aseptic lubricant, the examining fingers entering the vagina should note the size of the vulvar orifice, position of the coccyx, and condition of the rectum, whether full or empty. The fingers then passed upward to the external os, noting its size, thickness of edge, etc.; in ordinary cases it is necessary that the fingers pass through the os in order to distinguish the presenting parts of the

child. The various distinctive marks of each of the presentations must be sought for, and the diagnosis be made in accordance with those found to be present.

Management of First Stage:—If in our examination we are satisfied of the absence of complications, the vaginal examination will rarely need be repeated until after the rupture of the membranes. I usually absent myself from the room except when attention is needed by the patient.

Management of Second Stage:—In the second stage of labor, so long as all is normal the duties are few and simple. The posture of the patient is left largely to her own choice. As the labor progresses, one can sometimes regulate the rate of descent and save the perineum. The moment the head is born a finger is slipped within the passages to ascertain if the cord is coiled about the child's neck. When so found the loop or loops are drawn down one by one over the head.

The Delivery of the Trunk:—The head is held in the hand, the posterior shoulder folded forward and cautiously lifted over the perineum. Except in emergency cases the rest of the expulsion of the trunk is left to nature.

Ligation of the Cord:—The time of tying the cord is by no means a matter of indifference. The child gains from one to three ounces of blood by delaying the ligation for several minutes after birth, by this means the usual loss of weight during the first few days of infancy is said to be diminished. After the eyes have been treated the child is handed to some attendant, to be attended to and dressed.

The Third Stage:—Sometime within the first half hour after the termination of the second stage I expell the placenta by the method of Crede. As a routine ergot is given.

The Repair of Lacerations:—If the hemorrhage is very severe the cervical laceration is sutured. Lacerations of the pelvic floor are immediately sutured.

Toilet of the Mother:—Soiled portion of her body is cleansed, best with antiseptic

solution, her linen is changed if necessary, and all blood stained articles removed from the bed. The abdominal binder is helpful to steady the uterus, and it promotes the comfort of the patient, especially when the abdominal walls are lax. Before leaving I take final note of the pulse and the general condition of the mother, and give the needed instructions in regard to the general care of the mother and child.

Abnormal presentations have been the most frequent cause of difficult labor in my practice. These can usually be set right at the proper time, but are very difficult when that time is past.

Occipito-Posterior Positions:—In a case of this kind if one sees the patient before the membranes have ruptured, correction may be attempted by manipulation. Standing by the side of the patient, I put my hands on the abdomen, the right hand behind the child's anterior shoulder, the left hand in front of the posterior shoulder. I try to push the anterior shoulder toward the left side and the posterior shoulder toward the right side. By a repetition of gentle pushing movement, one may be able to bring the back to the front. If so the labor is left to its natural course. If the ease is not seen till the membranes have ruptured and the os well dilated, with the head engaged in the pelvis, I wait at least one hour to see if the head will rotate. If it does not three courses are then open, to pull, to flex, to rotate.

To pull:—The abnormal position causes increased resistance, so that additional force is needed. Apply forceps, pull, take care not to hinder rotation, but leave the turns to nature.

To flex:—It is more scientific to produce flexion. Authorities tell us to push up the forehead, with one or two fingers, and in doing so direct the pressure in such a way as to press the forehead not only upwards, but backwards, so as to favor both flexion, and the turn of the occiput to the front. This is a mode of treatment which is harmless. The only objection to it is that it is generally ineffective for what we want is

descent of the occiput. There is a simpler and better way.

To Rotate:—Put the left hand in the vagina, the right hand on the abdomen. The occiput is behind and to the right. The left shoulder will be in the front and to the right. Put the right hand behind the left shoulder of the child. Grasp the head between the thumb and four fingers of the left hand and in the interval between the pains, turn the occiput forward, at the same time, with hand on the abdomen, pressing the shoulder forward and to the left. If one can succeed in rotating the head and shoulders, the head will stay in its new position. If the rotation of the shoulders is imperfect, when you take your left hand away the head will go back into its old position. If you can rotate the head, hold it in its new position and apply forceps. I have effected delivery with forceps by this manner where ineffectual traction had been previously made.

Face Presentations:—During January of 1920 I had three face presentations in my obstetrical practice. This might not have been unusual in a clinic but they caused me some interest. These presentations are usually caused by conditions which prevent the occiput from getting into the brim. Am sometimes able to change a face presentation into a vertex. **Method:**—Put two fingers in the vagina and the other hand on the abdomen. In most cases the occiput can be felt quite easily, separated from the back by a deep sulcus. Press the face up, either by pressure on the jaws, and then on the forehead, and at the same time press the occiput down. If you have succeeded in pressing the forehead above the pelvic brim, then use both hands outside, with one hand pressing the occiput deep down into the pelvis, with the other pressing the face upwards and toward the middle line. No harm will come from trying to do this, even if it does not succeed. One has to be guided by the results obtained. Given a case in which the membranes have ruptured, but the head is not coming down into the os to dilate it, it is detained above the

brim. If the os will admit the hand, perform podalic version, bringing down one leg, and then proceed as in any breech delivery. Given another case in which the os is fully dilated, the head sunk low in the pelvic cavity, but the chin is behind. If after one or two hours, the chin has not turned forward, turn it to the front, and deliver with forceps. Have had some cases where the head was above the brim and very much needed axis traction forceps. In fact have had to use them a few times. But the need of such instruments only occurs in one case out of twenty in which forceps are required. In most cases in which assistance is needed while the head is above the brim, turning is better than any kind of forceps.

Breech Presentations:—Have never had any particular difficulty with breech presentations. This past winter had a breech presentation case of a congenital hydrocephalus, which I had to deliver by combined jaw and shoulder traction. This infant also had a spina-bifida, lived only ten days and died in a convulsion. If it was necessary would put forceps on the after coming head.

Eclampsia:—Eclampsia has caused me more worry than any other complication of pregnancy. I suppose there are malignant cases of eclampsia in which death is inevitable. I know of no specific remedies in this disease and no one definite plan of treatment to be pursued. Will refer to three of my cases in which mistakes were made, and which I observed with particular interest.

Case One:—Mrs. J., aged twenty-two, farmer's wife. Called at 2 A. M. one dark rainy morning. She was suffering from headache, and complained of numbness of her lower limbs, she said her urine had been scanty. Was in the seventh month of pregnancy. Gave her one-fourth grain morphia hypodermically and was telling them of her condition. Her eyeballs began to move and she went into a convulsion. Promptly gave her chloroform, and pro-

ceeded with the induction of premature labor, dilating the cervix with the fingers, dilation sufficient to apply the forceps being accomplished in an hour and a half, and then with as gentle traction as possible using the head as a dilator, delivered her. Patient rallied nicely, talked to her husband, and was apparently in fair condition, pulse ninety. She suddenly uttered a cry, went into a severe convulsion in which she expired. Question, Could I have done more for that woman and averted the final result?

Case Two:—Mrs. L., aged twenty, farmer's wife. Primipara. First seen when labor was well advanced. Patient very edematous, severe headache, disturbed vision. On vaginal examination found dilation almost complete with brow presentation. Was alarmed by the evidence of the eclamptic condition, gave chloroform, and delivered with forceps at once. Much force was used and the child's head injured. However the baby lived and is all right mentally, although its head is ill shaped. Mother had one post partum convulsion, otherwise made an uneventful recovery. Question, had I better used a few minutes in flexing that head before attempting delivery?

Case Three:—Mrs. M., aged twenty. Primipara. Section laborer's wife, another physician's case. Called at 5 A. M., patient in actual labor, which was perfectly normal, labor completed, and baby dressed by 6 A. M. Mother complained of a severe headache, and feeling queer, pulse eighty-eight, no edema. First convulsion at 6:15 A. M. Catheterized the patient, and obtained a quart of cloudy urine. Immediately used a hot corn pack, administered liberal doses of chloral by the rectum; veratrum viride to lessen the pulse was given, and chloroform anesthetic during each convulsion, of which she had five during the A. M. Was bled at 2:30 P. M. Ten convulsions during the first twelve hours. The last convolution at 6:30 P. M. was rather light. The patient developed a severe nephritis by the eighth day, but on a milk diet and some medication made a very satisfactory recovery. Question, Would I have been fore

armed had the patient been under my observation?

In conclusion I might say that most of us practicing obstetrics as we are compelled to, would be better prepared if

First: We could see our patients early in their pregnancy, and follow them through, particularly the latter months.

Second: If we would realize that we physicians, practicing in the country, are thrown largely on our own resources and therefore should be fore armed and prepared.

Third: Not be too proud to ask for help when necessary, for many difficult labor cases are not one man affairs.

Fourth: We would remember that surgery is so safe that we need not hesitate to deliver our obstetrical patients by cesarian section on the proper indication.

R

Tonsillectomies

LAVERNE B. SPARATA, M. D.,
KANSAS CITY

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

This paper will be limited to the combined dissection and snare, or a modified Boston operation, hemorrhage, primary and secondary, and post-operative treatment.

The dissection of the tonsil with the knife and snare is the method most universally used, the most abused, and the least understood of all operations.

The removal of tonsils and adenoids is probably the most common operation performed. Out of 1850 surgical cases at Bethany Hospital last year, 650 were tonsil cases, and I dare say from ten to twenty per cent of these were re-operatives, at least they were under my service.

The operation in children is best performed under an anesthetic of nitrous oxide or ethyl chloride with ether sequence. Over fifteen years of age procain with adrenatin one to two per cent, with nitrous oxide and oxygen, gives an absolute painless operation, without the after effect of an ether narcosis. Thromboplastin with procain, two to five per cent, gives an ex-

cellent anesthetic for local tonsillectomies. The patient is placed in a chair in the upright position and held by an assistant. Reflected light with head mirror is used. With nitrous oxide no mouth gag is generally needed when local anesthetic is used. In using ether the mouth gag is inserted, the tongue is placed by the operator and held during the operation by an assistant, except when the tonsil is grasped.

The tonsil is grasped with Sawtell forceps at the level of the supratonsillar fossa, and thrust deeply into the substance of the tonsil, where they engage the larger fibrous trabeculae without macerating the more superficial friable tissue. The forceps with sharp prongs are not so easily applied, and pull out when tension is needed, the pillars are more easily traumatized than with the Sawtell.

The tonsil is then pulled gently forward and inward with the Sawtell forcep so that the plica is put on the stretch and backed up by the bulk of the tonsil. With a sharp pointed knife held at an angle of 90°, an incision is made just outside the inner border of the plica upward to the junction of the posterior pillar and uvula and extended downward about an eighth of an inch. The incision on the anterior pillar is carried downward to the base. The white glistening surface of the capsule is exposed, which must be seen by the operator to remove any chance of the tonsil being lacerated or trauma to the pillars, and in carefully dissected tonsil with a sharp knife there will be no bleeding at this stage of the operation. The use of a very sharp knife cannot be over emphasized. If the edge is dull or a blunt dissector is used, especially a right angled blunt knife, the delicacy of touch is lost, the incision is made too deeply and the most common mistake is made. The forceps are pulled forward and inward with the line of capsule very distinct, the pillars are pushed back, all adhesions are dissected with the knife. The posterior pillar is not touched. The base of the tonsil is then grasped with the second forceps.

The loop of the snare is then slipped

over both forceps and then pulled down to a size so that the tonsil is forced thru the loop the tonsil everted. No danger of catching the uvula is present. With traction the tonsil is then pulled forward and inward, the cannula of the snare being above, and thrust down behind the superior lobe. Two to three minutes should be allowed in the separation of the tonsil from its bed.

The bleeding after the slow snare tonsillectomy is always slight, no vessels are touched by knife, as the veins of the posterior pillar which are so commonly injured by blunt dissection, no trauma to pillars, and the tonsil is completely removed.

After the removal of the first tonsil, a sponge is placed in the fossa. The sponges are made of two layers of gauze on the outside with cotton center, are very soft, and readily absorb blood and are not of a hardness to injure the tissues. The sponge is left in the fossa until the other tonsil is removed. To keep from losing the sponge a cord is attached and carried outside the mouth and watched by the anesthetist. In local tonsillectomies, generally speaking, we never use a sponge, and it is an exceptional case that even spits up a mouthful of blood.

A careful inspection of the fossa is made for all bleeding points which are crushed and held for a few minutes with the Sawtell forceps and will control practically all hemorrhage. Oozing can be controlled by pressure with a sponge dipped in a tannic acid alum solution, ferropyrin, or thromboplastin either on sponge or injected around the bleeding point. The fossa or sinus is then painted with a ten to twenty per cent solution of silver nitrate for two reasons; first it will control any post-operative oozing; secondly the post-operative slough is minimized.

The patient should be kept in bed for twenty-four hours, and should be in a hospital. Nothing but cold liquids the first twenty-four hours, ice collar to neck, and no irritating foods until the throat is practically well.

No gargle is advised. The throat should

be kept clean with alkaline wash as Seiler's tablets, normal salt solution alternating with a weak solution of hydrogen peroxide. Some patients experience only mild discomfort while in others the soreness lasts for a week or ten days, in which cases the fossa should be kept clean with washes and swabbed daily with comp. tincture of benzoin. The degree of after pain and soreness is in direct proportion to the size of the tonsils, especially the amount of the anterior surface of the posterior pillar that it covers, and which in consequence is denuded of mucosa during the operation.

Of all complication of the tonsil operation hemorrhage has been regarded to be the most serious. Dr. Barnes of Harvard Medical School gives the following in regard to hemorrhage. "While it is not said to be of rare occurrence, especially in the adult, it is not sufficiently common to be apprehended in the individual case. Even if it does occur, the cases in which it cannot be absolutely and easily controlled are extremely rare. It presupposes a number of conditions.

First, that the patient is not a hemophiliac.

Second, that the operation is done by a careful and competent throat surgeon and not a general practitioner of medicine.

Third, that the patient is in a hospital and that he remains there for at least twenty-four hours after operation.

If all these conditions are present, and they always should be, the chances of fatal result ensuing from the cause are so slight as almost to be a negligible factor."

Out of over four hundred cases operated with the above described knife and snare operation, two cases required the suture of pillars. One occurred in a robust healthy boy of fifteen, after blowing a horn, halloween night, seven days after operation. The pillars were sutured to control the bleeding. The second case in a foreigner who would not assist in either tying off or catching the bleeding point with forceps. A sponge was placed in fossa and two sutures put through the pillars. Three secondary

hemorrhages occurred, from two to six days after the operation, which were controlled by the removal of small clots.

Methods for stopping hemorrhage.

1. Pressure.

A. With or without an astringent.

2. Ligation of bleeding point.

A. Application of hemostat.

B. Application of ligature with Schoemaker hemostat which carries the ligature in a notch on one of the blades.

3. Suturing the pillars.

A. Grasping the whole fossa with the needle and tying.

B. Placing a sponge in fossa and suture over sponge.

C. Metal clamps for bringing and holding pillars together.

All patients should be examined at the end of the second or third day, children at least once before and once after the post operative exudate has disappeared. The probable reason we do not have septic infection in throats after the removal of tonsils is due to drainage and the application of silver nitrate. Rough ragged tags, bruised and devitalized tissues of the pillars and fossa due to improper technique, are what cause the extensive sloughs, with contracted pillars, scar tissue, loss of the anterior or posterior pillars with obliteration of the fossa.

R

FINDINGS REVEALED BY A SYSTEMATIC MEDICAL EXAMINATION OF THE PAROCHIAL SCHOOL CHILDREN IN KANSAS CITY, KANSAS

L. B. GLOYN, M. D.

COMMISSIONER, HEALTH AND SANITATION
KANSAS CITY, KANSAS

Before discussing my subject, "The Findings Revealed by the Systematic Medical Examination of the Parochial School Children in Kansas City, Kansas," I would like to give you a picture of the situation in our city. At the beginning of this school term, I appealed to the Board of Education for the privilege of carrying on, with volunteer

doctors, a systematic examination of the public school children. The paid dental inspector agreed to work with me and it looked as if we were going to have an efficient examination, when the Board of Education informed me that they were in favor of such an examination, but they did not feel that they had the power to allow me to make it in the absence of a state law giving them that authority. At the same time they stated that they could not keep me out of the schools, when examining for contagious diseases. I wrote Dr. Crumbine and he obtained an opinion from our Attorney General, which I will read, as it may be of help to some of you.

OFFICE OF ATTORNEY GENERAL.

Topeka, December 9, 1919.

Dr. S. J. Crumbine,
Secretary State Board of Health,

Dear Sir:

In reply to your letter of December 8th, I will say that I am of the opinion that the Board of Health can make a reasonable requirement for a physical examination of school children and that the Board of Education can, by resolution, enforce the order so made by the Board of Health. This can be done for the purpose of protecting the public health and to prevent the spread of communicable diseases, and I am of the opinion that it comes within the police powers of the state.

Yours very truly,

(Signed) RICHARD J. HOPKINS,
JKR-S Attorney General.

I then gave a copy of this opinion to the Board of Education and they turned me down again, this time admitting that they were afraid of the people who were opposed to medical examination. The thing that encouraged me and proved to me that the Board of Education was wrong in their action, was the fact that a few weeks after the time that the Board of Education refused this examination, on the grounds that the parents objected to it, the Kansas State National Congress of Mothers and Parent

Teachers Association, which was holding a meeting in Kansas City, Kansas, passed a resolution in which they stated that they favored medical examination of all school children. I was very anxious that some children should be examined, so as to furnish some data showing the need of medical examination of all school children. Through the assistance of Dr. Z. W. Wright, a dentist, who made all the arrangements with the priests of the different parishes, we have been able to make out a schedule for examining thirteen out of the fourteen parochial schools in Kansas City, Kansas. These schools are scattered all through the city, and I am of the opinion that they are very representative of our general condition.

A brief description of the way our examination was carried out might be of some help to you in accrediting our findings. The framework of the system was drawn from my experience in the army service, while examining members of the S. A. T. C. As soon as we get to a school, each doctor picks out his place to work. We then examine four or five of the oldest girls. These girls act as clerks to the doctors, so that the doctors do not have to stop to write. The children are then started down the line; each child with his individual card in his hand. This card is given to the child the day before the examination, so that the data containing the name, address, age, nationality, etc., is filled out before we start. The child meets the nurse first. She takes its height and weight and enters the figures in the column corresponding with the grade which the child is in. The child then goes to the dentist, who looks at the teeth; if there is any defect he marks a cross after the item, "Defect of Teeth," if there is a special diagnosis, which the dentist cares to make, he turns the card over and writes it in the space on the back provided for that. The child, taking his individual wooden tongue depressor with him, then goes to the rhinolaryngologist. The next step is the examination by the chest men for defects of the heart and lungs

and then the pediatrician for general bodily conditions. The last step is the examination of the eyes. This examination includes a test of vision by the Snellen's Test Type Charts. A chart showing animals and figures is used to test the vision of the children in the kindergarten and in the first grade.

After the examination is completed, a mimeograph letter is made out addressed to the parent of each child showing a defect. The following form, which has proved satisfactory, is the one used:

SCHOOL EXAMINATION.

To the Parent or Guardian of.....
..... On examination it has been found that your child shows an abnormal condition of and I advise you to take to your family physician dentist.

(Signed) L. B. GLOYNE, M. D.
Com. Health & Sanitation.

Examining Physicians—Dr. L. G. Allen, Dr. C. M. Brown, Dr. E. L. Dwyer, Dr. L. B. Gloyne, Dr. O. P. McCartney.

Examining Dentist—Dr. W. Z. Wright.

I have described our system, now, let us consider our findings. Of the 2,912 children examined, we have found that 696 were underweight. We considered that a child was underweight, if it was 10 per cent under the weight that it should be according to the standard weight chart of the government. We found 13 with nervous diseases, 30 with cardiac diseases and 70 with skin diseases. In 13 we have suspected Tuberculosis and 97 have been of the rachitic type. 336 have shown a defect of vision and 160 have shown other diseases of the eye. The most serious being trachoma, (68 cases). In one school we found 18 cases of trachoma and 18 cases of questionable trachoma. 1,204 had defective teeth. 1,016 had hypertrophied tonsils and adenoids. It is interesting to note the comparison in the different schools. It can be seen by looking at the chart that St. Josephs, St. Bridgids, S. S. Cyril and Methodius and the Holy Family have the largest number of

defects per pupil. I am unable to account for this unless it is by the fact that these schools have a large per cent of foreigners. St. Rose of Lima school is composed mostly of native born children, and it has the smallest number of defects. Possibly the small number of defects in the High School is the result of the survival of the fittest. Unfortunately we cannot claim the reduction in the number of defects in the High School as part of the good work of previous medical examination, because this is the first year that they have been examined.

I believe the system of having a specialist in each branch of medicine gives more accurate results than by having a doctor who examines the whole body. For instance, in the school where our ophthalmologist found 19 cases of trachoma, all these cases were required to secure medical attention. Two of the 19 children went to an optometrist who said that there was nothing the matter with the eyes. The priest called me up. I told him that the difference of opinion could be easily explained if he would stop to think that the optometrist had had a little training that would equip him to fit glasses, but did not have the least bit of training that would fit him to diagnose diseases of the eye. After that explanation, the priest had the parents take the children to a general practitioner. This general practitioner, who was not one of our first class physicians, failed to see the trachoma, so these two cases again came back to me. This time, they were referred to a specialist other than the original examiner, and the original diagnosis was confirmed. If a general practitioner had made the school examination, the trachoma might have been missed in the first place and the children would have suffered the consequences. In communities where the specialists are not available, I would recommend that the doctors each confine themselves to some one branch and thus they would become more efficient.

By having the doctors, nurses and dentist work at one time, a school of 450 can be examined in a half day, so that the school

work of the child is not interfered with very much and thus no antagonism from the parent is aroused on that ground.

Conclusions:

1. These findings show that all Kansas City, Kansas, children, and if they are to be used as an index, also all the children in the state of Kansas need a medical examination.

2. A State law should be passed which would provide for the financing of such an examination. This law, I believe should provide for, but not require, an examination. The reason I believe that way is that we would receive less opposition in getting such a law enacted, if the individual child is not required to be examined, except in cases of suspected contagious disease. At this time there is such a desire on the part of the public for the examination that very few would object to it. Of the 2,912 children which we examined only four objected. They were four high school girls who were lead by one girl, and even these girls did not object to any of the examination except that of the heart and lungs. It was interesting to observe that one of these girls was underweight and had a vision in one eye of only 20-100, and from general appearance, needed an examination badly. On the other hand, I have had several mothers come to me and state that their child was absent when the examination was held at their school and that they wanted me to examine their child, so that they might know if any defects were present. There has been a friendly spirit of competition spring up among the children. The leading question on the playground on the day of the examination has been, "How many defects did you have?" There has also been competition between the schools and I am sure that the children, the teachers and the priests who are in the schools that have a high average, will work even harder than will the others, to cut down their average by next year.

3. The state law, should provide that the medical examination be under the direction of the local Health Department and not

under the Board of Education, as our present dental law provides. In our city we now have a dentist, who is making an examination of the teeth of the public school children. This dentist has no connection whatever with the Health Department, and of course, he is not paid to examine the parochial school children. If a similar law was drawn up for medical examination and the doctors worked under the Board of Education we would have a parallel ease and efficiency of the examination system would be greatly diminished. I believe that the school dentists, school medical examiners and school nurses should be under the health officer, so that the work would not overlap. The health officer has a unique authority in a community, and it is sometimes necessary to use that authority, to get the best results. The school examiner often meets contagious diseases, and it is very convenient to have the authority, as well as the records of the Health Department at his command.

4. The most important finding in this examination is the revelation of a very urgent need for a State law that provides for medical examination of all school children in Kansas. Each one of us present tonight should, when we return to our homes, start, if we have not already started, a campaign which will educate the people as to the great need for such a law. With the parents of the children, which we are going to examine, in favor of and working for the law, I cannot help but feel that we will be successful in having it passed.

R

WHAT CAN BE DONE FOR THE PARALYZED? WITH FRENKEL EXERCISES

Modified for Home Use of American Patients

BY KARL A. MENNINGER, M. D., TOPEKA, KANSAS.
Assistant in Neuropathology, Harvard Medical School.

A FABLE

Once a man had a heavy load to move, and in his stable he had a number of good horses.

First he hitched "Medicine" to the load.

This powerful horse pulled and tugged with might and main, but was unable to move the load, and finally was returned to the stable.

Next "Diet" was given a trial. He concentrated an enormous fund of energy and applied it to the load, but likewise failed and was sent back to the stable.

"Mechanical Therapeutics" (otherwise known as Spinal Adjustment, Massage, Physical Culture, etc.) was trotted out and harnessed to the load and, though showing great ability, he also was a failure alone.

Then "Electricity" was called to the task and proved to have marvelous powers, but the load moved not.

Finally a new horse, "Mental Science", was tried, but every time that it seemed that the load was about to move, it settled back into the old rut. "Mental Science" excited great hopes, but like the others, was not equal to the task alone.

The man had now tried all of his horses without avail, and his wagon was fast settling deeper in the slough of "Pessimism". He became discouraged and said: "It's no use, the load cannot be moved."

But a philosopher, who had been looking on, said: "Why not try all the horses at the same time?"

The suggestion was acted upon, and the load moved off with great ease.

What can be done for the paralyzed? This is a frequent question, but less frequent than it might be if a hopeless answer were not usually expected. Many hesitate to ask; many neglect to ask; and many physicians to whom the answer is put have nothing to reply. Now the situation is not quite so bad as that.

There are many forms of paralysis which can be helped, which can be improved and even in some instances cured. Of course every case has to be judged on its own merits. But every case is deserving of that very judgment, and should not be classed as "a case of paralysis" and abandoned as such. "Seek the Cause" is the motto of every scientific physician, and in the elim-

ination of causes of evil we have a most fruitful field.

But this is not all. Causes sometimes elude us. Some causes, even when found, cannot be removed. What then? It is the "What Then?" that this paper specifically sets out to answer. I pass over the opportunity to present all the forms of paraplegia, of paralyzed, spastic or ataxic legs, because I want to set forth what can be done even when no cause can be found or if found cannot be removed.

Most men stop here. The patient lives on, however, he does not stop. What is he to do? Is it any wonder that in hopeful despair he goes from one faint hope to another, one charla'an to another, osteopath to chiropractor, Christian science to spiritism? The medical profession, standing as it does for the adaptation of **every known curative means** to the alleviations of suffering and disease **must not neglect** the offerings of mechanical means of treatment. Nor, on the other hand, must they fall into the mire of using them unskillfully and unwisely as do certain "pathies" and "actors."

One can theorize **ad libitum** as to the way in which the benefit from mechanical treatment is derived. The gist of it is this: In the first place the nutrition of the tissues is improved by increased circulation, by physical stimulation and by passive use. In the second place the nervous control of the limbs, if not entirely destroyed, may be re-educated to a remarkable degree, so that, while less nerve tissue is present to carry impulses, that little does its work unusually effectively. In the third place, the patient gains confidence and self assurance. This is not "suggestion," in the sense of a mysterious beneficial influence, but is plain, ordinary encouragement, born of seeing practical results of a practical method.

Massage, correctly performed, is of immense value. It is unfortunate that, in this part of the country, we have so few capable of expert massage. One might even grant the osteopaths certain virtues since they

readily grant the value of massage, but for the fact that few if any of them are adequately trained in it. The schools of massage in Sweden and in a few of the larger cities of this country are turning out a supply of trained masseurs and masseuses which is quite insufficient to meet the demand. I have found the most practical thing to be to employ full time graduates of schools for massage. It is to be hoped that more opportunities for this method of treatment will be available to the physicians in Kansas before long. The varieties of massage, the details of its application, the technique of its execution, are matters too lengthy to be discussed here. In short it may be said that, if capable massage can be secured, (not as given by a "Doctor", M. D. or otherwise), it is advisable, at least as often as every second or third day. It should be directed to the paralyzed parts of the leg, legs, thigh, thighs, arm, arms, etc., and of course not to the spine (as one patient informed me his osteopath persisted in doing.)

Bathing is a second valuable help. Prolonged warm baths, one to three hours in duration, at a temperature of 96 degrees to 97 degrees F., are preferable. These should be given daily. An ordinary bath tub may be used, altho the difficulties of getting a comfortable position and in keeping a constant temperature are not inconsiderable. A regular thermostatic constant flow hydrotherapeutic bath tub of extra length and provided with a hammock, is ideal.

Passive exercises, i. e., the manipulation of the paralyzed limbs by another person, is a third helpful means. The extremities should be taken in the attendant's hands, and moved slowly and smoothly thru all the normal movement positions, flexion, extension, abduction, adduction, rotation. This will increase the flexibility of the joints, the motility of the muscles, and also improves the "muscle sense" or sense of appreciating the position of the limb, a factor of importance in ataxias of all sorts.

Active exercises systematically applied in the form of a series of graduated lessons in

re-educating partially movable limbs are perhaps the most valuable single asset of mechanical means of treatment. They are simple, they are effective, they are elastic, they are cheap. Hence they deserve to be dealt with here in detail so that any physician may apply them to patients who can use them. There are, in general, two main forms: The Frenkel exercises and the Maloney exercises. While I am personally familiar with the leading exponents of the latter, and realize the value of their methods, I prefer the former for home use because of their simplicity, because of their elasticity and because they can be carried on without the help of a physician or trainer if none be available. In some cases I use both. But usually I give the patient the following printed matter and prescribe from time to time certain sets of exercises, e. g., exercises 1 to 10 three times daily for two weeks; then add exercises 11 to 15 etc. I am reproducing here exactly what I set before the patients themselves. Their use is not copyrighted or patented by me and any physician is welcome, nay, even urged, to make use of them where he has opportunity.

FREUKEL EXERCISES AS MODIFIED BY THE
AUTHOR

A chick can walk as soon as it is hatched; but a man is not a chick. The human species is not endowed with this faculty. A baby must learn to walk and does so only after much effort and many falls. Once learned, it is usually not necessary to learn again to use the spinal cord (and brain) mechanisms to keep our balance. But after long illnesses, and after any injury to any part of the machinery by which we govern our movements, re-education is necessary.

Most of the patients to whom I assign these exercises have had more or less destruction of the spinal cord. Either motor power or controlling power or both are impaired, with or without loss in the normal sensation. The point of exercises is that, even when much of the spinal cord is destroyed, it is still possible to educate

what remains so that it functions better than without training. Systematic exercises will not remake spinal cord tissue that is gone; but they will help you use better what still remains to you. It is on record that some patients totally unable to stand or walk, have by means of intensely persistent and determined effort with these exercises, learned again to walk almost normally. And it is the experience of many that by their use much improvement has followed.

The form of systematic exercise here advocated was first proposed by Dr. H. S. Frenkel in Switzerland; since then there have been many modifications by Frenkel and others, including (herein) myself.*

* Acknowledgment is hereby made to Frenkel, H. S. The Treatment of Tabetic Ataxia; tr. by Freyburger; Rebman & Co., New York, 1905.

GENERAL DIRECTIONS

1. There are two divisions of the exercises; those to be practiced in bed and those to be practiced in the erect position. The former require no apparatus; the latter require preferably a strip of linoleum lined with white strips at stated intervals, such as you have been supplied with.* I will prescribe which exercises you are to practice. Do not exceed your assignment. If in doubt as to any particular phase, consult our masseuse or myself.

2. Go slow! There is a tendency on the part of all patients to do the exercises too rapidly. Do them as slowly as possible, and the greater progress you make, the slower you will do them. Smoothness will also replace jerkiness.

3. Rest! Do not exercise to the point of fatigue at any time. Rest between exercises, and in the walking exercises, have chairs placed along the strip-walk so that you may fall into a chair any place if you get tired.

4. The meaning of a few words may be quickly grasped: "Flexion" means doubling up (the knee, hip, or any other joint). "Extension" means straightening out (at the joint). "Flexing the leg" means flexing both the thigh and the leg, since both knee and hip have to bend. "Abduct"

* 24 inch steps, marked with white enamel lines on a 20 foot strip of linoleum, with $\frac{1}{2}$ and $\frac{1}{4}$ steps marked with shorter lines.

means to move towards the opposite side. An organist playing the pedals is constantly abducting and adducting his thighs (and legs).

5. On the first group of exercises to follow, those to be done lying in bed, keep the limb which is being moved in a vertical plane and the toes and foot drawn upwards (flexed). It is convenient to wear "B. V. D." type of underclothing so that the movements of the limbs may be unhampered and may be watched. Every movement should be very carefully watched, and checked up by the patient himself.

EXERCISES

Group 1. Reclining. Repeat each exercise 4 times unless specially directed otherwise.

1. Flexion of one lower extremity (hereinafter called "leg") in the knee and hip joints—extension.

2. Flexion of one leg in knee and hip joints, abduction of flexed leg, adduction of flexed leg—extension.

3. Flexion of one leg in knee and hip joints, but only to one-half the angle—extension.

4. Flexion of one leg in knee and hip joints up to one-half of angle (as in 3), abduction, then adduction—extension.

5. Flexion of one leg in knee and hip joints, a voluntary halt to be made during flexion by the patient—extension.

6. Flexion of one leg in knee and hip joints—extension, a voluntary halt being made by the patient during extension.

7. Both legs are simultaneously flexed in knee and hip joints—extension.

8. Flexion of both legs in knee and hip joints, abduction, adduction in flexed position—extension.

9. Half-flexion of both legs in knee and hip joints—extension.

10. Half-flexion of both legs; abduction and adduction in this position—extension.

11. Flexion of both legs; a voluntary halt made during flexion—extension.

12. Flexion of one leg in knee and hip joints—extension; the heel is not allowed to slide on the bed, but kept some inches above it.

13. One leg flexed until its heel can be brought to rest in the groove between the patella and thigh of the other—extension.

14. The heel of one leg is brought to rest on the top of the patella of the other—extension.

15. The heel of one leg touches the other leg above the patella, voluntary halt—extension.

16. The same as 14, a voluntary halt being made before extension.

17. The same as 14, but the heel touches the middle of the tibia instead of the patella.

18. The heel touches the middle of the tibia, a voluntary halt being made; the leg is then flexed in the knee and hip joints and extended.

19. The heel touches the ankle of the other leg—extension.

20. The same as 19, a voluntary halt being made before extension.

21. The heel is put on the toes of the other foot—extension.

22. The same as 21, a voluntary halt before extension.

23. The heel is first put on the patella on the other side, then raised and put on the middle of the tibia, lifted off again and put on the ankle-joint, and finally on the toes.

24. Same as 23 in inverted order.

25. Flexion of leg as in 1; the heel is then put on the patella—extension.

26. The patient puts his heel on the knee; the heel then slides along the tibia down to the ankle-joint—extension.

27. The same as 26 but the heel, instead of stopping at the ankle-joint, slides along the crest of the tibia back to the knee joint.

28. The heel rests on the knee, then slides along the tibia, stops in the middle of it, then continues until the ankle-joint is reached and stops again, then continues to move down to the toes—extension.

29. The lower limb is flexed in the hip and knee joints until the leg forms a right angle with the thigh—extension. (Twice).

30. The knee-joint is kept extended, and

the limb is first flexed in the hip-joint (foot slightly dorso-flexed), then slowly extended. (Twice).

31. The same as 30, the limb is then flexed as in 29—extension. (Twice.)

32. The same as 29; the knee is then extended, and the limb slowly lowered on the bed. (Twice).

33. Both lower limbs are to be flexed in such a manner that both knees and inner ankle joints remain in apposition—extension.

34. Both lower limbs in close apposition are to be half flexed, then extended.

35. As in No. 33, but two or three voluntary halts should be made.

36. Both limbs to be flexed; one remains flexed; the other is extended, and vice versa; then both are flexed, followed by extension.

37. One limb to be flexed in the usual manner; while it is being extended, the other is first flexed, then extended.

38. One limb first flexed, then abducted while the other is being flexed; the abducted leg is then adducted while the other is being extended—the extension of adducted leg.

39. One limb is first flexed, then extended; the other is being abducted while resting on the bed—adduction.

40. One limb is flexed while the other is being abducted—extension of the flexed, adduction of the abducted limb.

41. As in 37, with this complication, that the heel does not touch the bed while the limb is being extended.

42. One limb is flexed in hip and knee joints, then abducted, while the other is being flexed; then the first limb is adducted, while the second is extended without touching the bed; lastly, the first limb is extended without resting on the bed.

43. One knee is flexed in knee and hip joints, then extended without touching the bed, while the second is first abducted and then adducted.

44. One limb is flexed in hip and knee joints, while the other is first abducted, then flexed; both limbs are then brought together and extended without touching the bed.

45. A combination of Exercises 35 to 40, with this complication; that during flexion the heel of the moving leg does not touch the bed at all.

46. Sitting Down—The knees should be slightly and to the same degree flexed, a matter of some difficulty, both on account of the state of hyperextension in which the knees are usually kept in consequence of the hypotonic condition of the muscles of the calves, and because both knees are hardly ever equally affected, so that the patient has to direct his attention to either of them. After the knees have been flexed, the body has to be slightly bent forward. The patient then begins to sit down, flexing his knees still further while the bending forward of the trunk continues. Thus, the line of gravity remains in the neighborhood of the ankle joints and the body, maintaining its balance, is slowly lowered into the chair. The body should be kept in the anteflexed position until the patient is actually sitting in the chair. Care should be taken that your ankles do not turn over or you yourself pitch forward.

47. Getting Up—Both feet should be drawn back until their heels are partly under the chair. The body is then bent forward until the knee joints have completed a movement of partial extension when it is slowly erected. It should not be forgotten that a healthy person when sitting far back in a low chair draws his feet as much as possible under the chair, and when getting up balances himself on the balls of the toes, and not on the whole foot. Thereby the center of gravity is at once transferred far enough back, so that it does not become necessary to bend the body much forward. On the other hand you cannot balance yourself on the toes; you need the whole foot, and especially the heel. You can therefore, draw your feet only so far back that it is still possible for you to put your heels on the ground; that is, the heels are put just beneath the edge of the seat of the chair. Consequently the body must be bent forward so far that its center of gravity is poised above the heels. When the patient is sitting

far back in the chair, it often happens that, even a maximum degree of anteflexion of the body is not able to shift the center of gravity sufficiently forward, and the patient cannot rise on his feet. It is, therefore, necessary for the patient not to sit too far back in the chair if he wishes to try to get up from it without support.

Group 2. Ereet.

Note: Tack the marked linoleum strip to the floor firmly; arrange chairs at intervals along the sides. Begin by traversing only 3 to 5 yards; later you can go several times the length of the strip without fatigue, but remember that fatigue is dangerous! Wear laced-up shoes. Women should wear knickerbockers or trousers since it is essential that you watch your step! Count your pulse occasionally and stop exercising at once if it exceeds 120 beats per minute. Do not begin again until it has fallen to 100 or below. Use a cane, or two canes if you need them. Keep the feet parallel. Remember to GO SLOW.

At each exercise the "commencing leg" is the one which did not begin the immediately preceding exercise. "Initial position" means both feet together, in apposition. "Single step" means that both legs step out the same distance so that, at the completion of both movements, they are again the "initial position." "Progression" means as in ordinary walking, one leg swinging past the other, then the second past the first, etc.

48. Half-steps forward, single steps, (that is, after each step the feet are placed together.)

49. Half-steps forward, progression.

50. Three-quarter steps forward, single steps.

51. Three-quarter steps forward, progression.

52. Quarter-steps forward, single steps.

53. Quarter-steps forward, progression.

54. Half-step forward (single step); quarter-step forward (single step). This combination of two steps of unequal length is to be repeated five to ten times in succession.

55. Three-quarter step forward (single step); quarter-step forward (single step). Repeat five to ten times.

56. Half-step forward with leg A; three-quarter step with leg B; quarter step with leg A; half step with leg B; three-quarter step with leg A; quarter-step with leg B. Repeat three to ten times.

In this exercise each leg has done the same amount of work (three steps), but always changing the length of the steps and returning to the initial position after completion of the third step.

57. Quarter-step forward with leg A; quarter-step with leg B; quarter-step with leg B; quarter-step with leg A.

58. Three quarter steps forward with leg A; two quarter steps with leg B; half-step with leg A; three-quarter-step with leg B.

59. Walking Sideways. The patient makes a half-step to the left, then returns to his original position.

60. Three-quarter-step to the right, one long step to the left, then a short step back to the original position.

61. Several quarter-steps to the left, then return to original position and vice versa.

62. Longer and shorter steps to be made indiscriminately in either direction.

63. One-quarter-step backward; (single step).

64. One-eighth-step backward; (single step).

65. One-eighth-step backward; continuing.

66. One-eighth-step backward, the left foot stepping out first; then two more such steps with the right foot leading.

67. One-quarter-step backward; continuing.

68. One-half-step backward; single steps.

WALKING WITHOUT USING THE EYES

69. Repeat the preceding 21 exercises with the eyes 3 to 5 feet in front of your feet instead of on them.

70. Repeat the above 21 exercises with the eyes directed at a point on the wall in front of you.

71. Repeat the above 21 exercises with your eyes directed at a point near the ceiling of the wall in front of you.

72. Repeat the above 21 exercises with your eyes closed.

WALKING IN CHANGING DIRECTIONS

When the patient has acquired proficiency in these exercises above, he is set at practicing similar steps with frequent change of direction, walking in curves, carrying on simultaneous arm exercises, etc. These will be suggested by the doctor's ingenuity, altho various forms prescribed may be found in the books.

Christ's Hospital.

R

Significance of Etiologic Factors in Treatment of Peptic Ulcer

Laboratory investigations in 2,168 definitely proved and not "clinically surmised" cases of peptic ulcer have revealed these facts: Of this number, fifty-six patients, 2.6 per cent., had gastric contents containing no free hydrochloric acid; 499 patients, 23 per cent., had free hydrochloric acid values below 30; 890 patients, 41 per cent., had free hydrochloric acid values within the normal range (40 to 50, Topfer scale) and in 723 patients, 33.4 per cent., the free hydrochloric acid values were greater than the so-called "normal." These investigations show that in no form of gastric disease can the acid values be considered as indicating the causative factor of the disease, or that such acid variations are consequent on that disease; that, in health, the range of acid values in gastric juice is wider than is that of any of the values which formerly were supposed to be indicative of, or consequent on, gastric malfunction. With the purpose of further emphasizing the necessity for considering, chemically, the significance of etiologic factors in the treatment of peptic ulcer, and with the object of demonstrating the need of strict individualization in any ulcer regimen, Frank Smithies, Chicago (Journal A. M. A., June 5, 1920), analyzed 500 gastric ulcers. These ulcers were proved to exist actually by objective data, namely, from surgical roentgen-ray and pathologic studies. In the group of infectious origin there were 173 cases; arteriosclerotic, 77 cases; visceral hypertension, 68 cases; chronic anemia (so-called "chlorotic"), 61 cases; syphilitic, 41 cases; visceral hypotonia, 27 cases; postoperative, 27 cases; industrial intoxication, 22 cases; metabolic dysfunction, 18 cases, and traumatic (abdominal injury from blows, falls, etc.; intragastrically, foreign bodies), 8 cases.

BELL MEMORIAL HOSPITAL CLINICS

Clinical Pathological Conference of H. R. Wall, M. D., Department of Pathology.

The patient from whom these organs were obtained came into the hospital complaining of "Pain in the right hip". Two weeks before admission he said that he had a severe chill followed the next day by a dull persistent pain in the right thigh and hip. This pain became of a severe sharp and stabbing character on attempting to move the right leg. No pain elsewhere. Four years ago he was operated on in the hip for a similar spell. This attack was preceded by a history of an inquiry.

On examination the right thigh was almost immobile. There was a long scar over the outer part of the hip joint and in the middle of this scar there was a discharging sinus. Over the sacrum there was a ragged ulcer. An abscess was also found at the root of the right incisor tooth. The tonsils were inflamed and the anterior cervical glands enlarged and tender. The right leg was swollen and pitted on pressure. In addition to the sinus the right hip was swollen and tender. The urine showed considerable albumen. The temperature curve was irregular, never over 102 degrees, and dropped down the last four or five days. The red count was 4000000. The white count on admission was 22500, but dropped to 14500 a few days before death. The report from the X-ray department was "Chronic osteomyelitis". The patient was in the hospital about ten days. An abscess formed in the hip joint which had to be opened and drained. The most annoying and serious symptom was the uncontrollable hiccup and occasional vomiting.

The clinical diagnosis was chronic osteomyelitis. No other complications were noted. Tuberculosis was considered but excluded on the history.

The autopsy was performed a few hours after death. The right leg was partly flexed on the thigh and almost immobile. The entire limb appeared swollen and edematous as compared with the other limb.

A drain led into the tissue around the right hip joint and also seemed to involve the trochanter. A large necrotic ulcer was over the sacrum and some pus oozed from the base. On opening the peritoneal cavity no free pus was found. Around the right internal iliac vessels and extending under the iliac fascia into the obturator foramen and over the right side of the sacrum there was a large amount of the thick purulent exudate. This pus involved necrotic bone about the acetabulum, neck of the femur and the trochanter. A probe could be readily passed through to the sinus on the outer side of the thigh. The pus also extended up under the iliopsoas muscle but the lumbar vertebrae were not diseased.

Most of the organs taken from this autopsy are very soft in consistency. You will note that the heart is unusually flabby. The myocardium is pale but the endocardium is normal and there is nothing else worthy of note except the flattening of the columni carni indicating dilatation. The lungs show irregular areas of congestion with a more diffuse congestion of the posterior portions, especially on the right side. There are multiple gray areas of consolidation about the bronchi 5-20 mm in diameter. Towards the posterior part the lung is more solid in consistency and dark red in color, indicating a hypostatic pneumonia. You will note that many of the areas of broncho-pneumonia are softened in the center with abscess formation. One can also see that some of these areas are not related to a bronchus, suggesting a hematogenous origin. Microscopically, clumps of bacteria are scattered throughout many of the abscesses. Smears from the pus show staphylococci. In addition, clumps of bacteria are seen in thrombi closing many of the pulmonary arteries.

The liver as you see from its appearance and position is unusual. It is pale brown in color and, instead of maintaining its form when placed on the table as a normal liver does, it is distinctly flattened out. It cuts easily and the cut surface has a soft boiled, disintegrated appearance. The usual

lobulation is very indistinct. Under the microscope the cells are swollen, appear degenerated and their usual arrangement in radiating cords is broken and they seem to be loosely shuffled together.

The condition of the kidneys is still more striking. You will note that both organs are swollen and seem to be twice the normal size. Also that they are flabby. The capsule is adherent but can be stripped off, leaving a roughened surface that has a blotchy red and yellow appearance. The organ cuts easily, but the cortex and medulla are so swollen that it is difficult to tell where one ends and the other begins. The cortex has a more pale yellow color, is soft, disintegrated and does not show the usual striations. The glomeruli cannot be distinguished. When a few drops of iodine solution are dropped over the surface of the cortex many small dark brown dots appear, indicating amyloid deposits in the glomeruli.

Microscopically, the organ is still more strikingly diseased. The cells of the convoluted tubules are desquamated and necrotic. Hyaline casts are present in many of the tubules. All of the glomeruli are abnormal in that they show fibrosis and masses of hyaline material (amyloid) between the capillaries patches of fibrous tissue and leucocytes are scattered throughout the organ. The pelvis and ureter and bladder are normal.

The spleen, as you note, is about twice its usual size. It is dark red in color, soft in consistency, cuts easily, and the cut surface shows small transparent sago bodies in place of the Malpighian bodies. These sago bodies stain dark brown when a weak iodine solution is poured over them showing their amyloid nature. You will note that this color does not come out at once, but in a few minutes it is very distinct.

The right internal inguinal and iliac lymph nodes are, as you see here, much enlarged and softened. The adrenal glands look normal, but if you will glance into the microscope at the section of this organ you will see a striking picture. The cortex can scarcely be recognized. It is mark-

edly infiltrated with hyaline material which also gives the chemical reaction for amyloid. The medullary portion does not appear changed. The stomach shows thickening of the mucosa, is covered with considerable mucus and presents the typical appearance of a chronic catarrhal gastritis.

Summarizing, we have an acute and chronic osteomyelitis broncho-pneumonia hypostatic pneumonia, embolic abscesses and bacterial emboli in the pulmonary vessels, acute and chronic nephritis, acute toxic hepatitis, general amyloidosis, dilatation of the heart and acute splenic tumor.

There are many points in this case which are both interesting and instructive. The clumps of bacteria in the pulmonary arteries show that bacteria have invaded the blood streams, probably arising from the thrombus in the tight internal iliac vein which was surrounded by purulent material. The reason why the bacterial emboli were not present in any other organ besides the lung was because of the anatomical position of the lungs. Emboli arising in the larger veins always lodge in the lungs first because there is the first capillary bed they meet. Often some of the bacteria lodge on the valves of the heart and produce an endocarditis, but this heart shows no such process.

All of the lesions found indicate an intoxication of a very severe grade. The soft flabby heart, liver and kidney and the marked degenerative and necrotic changes in the cells of these organs afford abundant organic basis for the persistent hiccup and vomiting which played such a prominent part in the patients symptoms a few days before his death. This was probably due to the direct action of toxic substances upon the important nerve centers in the medulla.

Again the anatomical findings, show the presence of an overwhelming infection resulting in the fall of the temperature curve and the leucocyte count several days before death of the patient. This is a frequent occurrence in severe infections and

when it occurs in the face of a serious infection is regarded as a bad omen.

There was at one time a question as to whether the condition could not have been due to tuberculosis. At the autopsy there was no evidence of tuberculosis in any of the organs. It is true that osteomyelitis rarely involves the joint and tuberculosis frequently does. But while the outer part of the acetabulum was secondarily involved there was no apparent communication with the joint cavity. The clinical history and symptoms did not support a diagnosis of tuberculosis.

The general amyloidosis is of more than passing interest. It is commonly found in a disease such as this patient possessed. There is usually an old chronic suppurating focus in the body. Bone tuberculosis, chronic osteomyelitis and syphilis are common causes. While suppuration is usually present this is not always the case. You will recall that a few months ago I demonstrated the material from a typical case of amyloid disease yet no primary focus was found and there was no explanation except syphilis which the patient was known to have. It has been noted before that amyloid may be caused by syphilis without suppuration. A peculiar feature about the present case is that the liver shows no amyloid though it was demonstrated in the kidney, spleen and adrenal gland.

A word about the formation of amyloid. It is well to recall that amyloid is a protein substance, which is not a degeneration of cell cytoplasm, but an infiltration of a hyaline protein substance in the interstitial spaces and is deposited around the cells. Three constituents are necessary for its formation; a soluble protein substance free in the intersitial spaces, chondroitin sulphuric acid which is brought to the tissue spaces by the blood and, finally, a ferment produced at the suppurating focus either through bacterial action or through disintegration of the leucocytes there. In any event the combination of these three elements results in the precipitation of an in-

soluble portion in the form of a hyaline substance—amyloid.

Amyloid is always placed outside of cells. It is usually deposited outside of the endothelial lining of vessels and blood or lymph spaces e. g. the glomeruli of the kidney where it is found between the capillaries of the glomerular tuft. As it accumulates it causes a gradual pressure atrophy and necrosis of the cells surrounded by it.

A small amount of amyloid is not serious in itself. It is only when it accumulates in large amount that it becomes serious. It affects the functional activity of the kidney more than the other organs. There are few lesions of the kidney which result in such a large excretion of albumen in the urine as an amyloid kidney. In most cases of amyloidosis death is due to the gradual reduction of kidney substance, particularly the effective portion of the glomeruli with progressive kidney insufficiency resulting therefrom. In the present case amyloid was not present in sufficient amount to cause serious functional disturbance. Death in this case was probably due to the overwhelming intoxication with the broncho and hypostatic pneumonia coming on as a terminal event.

The presence of an abscess at the root of one of the teeth and of inflamed tonsils is of significance. These lesions may have been the source for the infection in the femur. It is a well recognized fact that such lesions in the mouth lead to the passage of a few organisms in the blood which on finding a point of lowered resistance such as would follow an injury to a bone as occurred in the present case lodge, multiply and set up an acute inflammation. The staphylococcus was the etiological agent. This organism is the usual cause of acute osteomyelitis.

R

A Five or Six Year Course in Medicine

Instead of demanding two extra years of college work for admission to medical study, John A. Kolmer, Philadelphia (Journal A. M. A., Aug. 7, 1920), believes that medical education will be better served by keeping

the entrance requirements at the present minimum and extending the course in medicine one year, or two years if the medical school can guarantee a hospital internship so that the degree in medicine is conferred after the successful completion of at least one year's residence in an approved hospital. By reason of the added facilities for teaching the medical sciences, Kolmer would give all students successfully finishing the first two years' course in medicine the degree Bachelor of Science or Bachelor of Medical Science (B. Med. Sc.); the degree of Doctor of Medicine should be conferred after the successful completion of the entire course of five or six years. The first four years of the five year curriculum outlined by Kolmer provide for a liberal and comprehensive course in medicine, including instruction in the specialties. The added fifth year will afford more time for developing dispensary teaching, including sociological medicine and for more laboratory work in connection with the clinical branches. The fifth year, by providing ample opportunity for elective studies, will also enable the student to concentrate on one or more clinical or laboratory branches and engage in original investigations under certain conditions to better advantage than at present, without sacrificing the principal aim of the medical school to give a broad and comprehensive course of instruction before the student is permitted to begin specialization.

R

Treatment of Diabetes Complicated by Pulmonary Tuberculosis

The fact that the untreated diabetic is more likely to develop pulmonary tuberculosis than the diabetic who is kept sugar-free by modern methods is emphasized by the experience of N. W. Janney and R. R. Newell, Santa Barbara, Calif. (Journal A. M. A., July 17, 1920.) In a series of sixteen diabetic cases complicated by pulmonary tuberculosis showing activity, twelve patients definitely improved during a course of institutional treatment; diabetic symptoms disappeared in all but two cases, observed but a short interval. Tuberculous symptoms improved in the majority of cases. Principles of treatment recommended are the judicious employment of sufficient under-nutrition, combined with rest, to maintain the patient sugar-free and control the tuberculosis. Fasting is unnecessary to obtain good results. Ill advised fasting may lead to a fatal outcome. Rest is at least as important as in the treatment of uncomplicated pulmonary tuberculosis.

THE JOURNAL
of the
Kansas Medical Society

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Playing It Safe?

One is likely to have a faulty perception of things when looking in from the outside, but he may, nevertheless, draw some conclusions that are without prejudice. In any discussion of the privileges conferred upon the medical profession by the federal prohibitory laws the doctors of Kansas are outsiders, but their views of the ethical questions involved would, no doubt, vary quite as much as do those of the doctors of Illinois and Missouri. Although prohibition has been a legal fact in Kansas for a long time and doctors have even been prohibited from possessing or dispensing alcoholic liquors for a number of years, there are still some who have not yet learned that alcohol has no place in medicine, that it provides no beneficial therapeutic effect that cannot be more satisfactorily obtained from other drugs.

In spite of the unpopularity of their opinions there are physicians in this long dry state who will assert that, to the best of their knowledge and belief, good spiritus frumenti, administered in the right amount and at the right time, has saved for another struggle some who have already heard the rustle of the angel's wings. Possibly the long period of drouth in Kansas has eliminated from their consideration the beverage qualities of alcohol and the doctors here are able to estimate its therapeutic properties without prejudice—in other words, they may regard alcohol only as a therapeutic agent. At any rate they are outsiders in any such discussions as the following:

THE EASIEST WAY

A gynecologist was speaking. "No," he said, "I haven't taken out a permit. In twenty years of practice I have yet to find a case in which I could be sure whisky was beneficial. Not having a permit makes it easy for me to turn down requests from my intimate friends and patients." Then the opinions of a well-known internist, a pediatrician, a surgeon, and some general practitioners were sought. None of them, with the exception of one of the latter, had taken out a permit. He had given ten prescriptions in three months, and he admitted—not for publication—that in nine instances the prescription was written at the patient's request, and in the tenth something else would have served. Don't subject yourself to temptation; don't hurt the feelings of your patient or of a very particular friend by refusing to write a "prescription" when he pleads for one. Have a good excuse for not doing so. The easiest way is not to have a "permit," much less a book of blank prescriptions.—Jour. A. M. A., July 24, 1920.

Outsiders will hardly appreciate this kind of advice. If physicians all over the United States refused to take out narcotic licenses on the same grounds there would be considerable needless suffering. The only difference is that no one questions the therapeutic value of opium and its derivatives. One who is confident that beneficial therapeutic effects may be obtained from the use of alcohol is no more justified in declining to take out an alcoholic permit, on the grounds stated in the above, than in declining to take out a narcotic license.

The laws of Kansas do not permit druggists to dispense alcohol or alcoholic liquors on the prescription of a physician, nor do they permit physicians to possess or administer such liquors, but there are doctors in Kansas who are willing to take a chance with the law when the life of a patient is at stake. One feels like shaking hands with a doctor who has the intestinal equipment to do whatever he believes will save a life, in spite of law, religion or politics. But what about the doctor who would deprive himself of a possible aid in saving life in order that he might avoid a little trouble and inconvenience. The question is, as viewed by an outsider, whether it is better to play safe, for yourself, or sometimes take a chance, for the other fellows' sake.

R

Tales That Are Told

When one listens to the stories some people like to tell about another doctor, it is well to bear in mind that he himself may

be the subject of the next sketch. When listening to the story of a disgruntled one-time patient of another doctor, it is well to ascertain if the other doctor has been paid for his services.

There are honest deadbeats and dishonest deadbeats. The former very frankly refuse to pay, give no excuses and need none to satisfy their consciences. The latter do not pay, but they lack the courage of the honest deadbeat. They try to convince themselves—also their friends—that some great injustice has been done them. They magnify slight deviations from the usual details into serious neglect of duty. They distort facts and manufacture evidence to make their stories plausible. The more valuable the services rendered and the greater the obligation to the physician who rendered them, the more vituperative the stories that are told. That is the dishonest dead beat way of satisfying any conscience he may have and preparing he way for his next victim.

A few weeks in the office of the Credit & Collection Bureau would convert anyone inclined to listen too credulously to the stories that are told by the dishonest dead beat. A doctor was called in a serious emergency to care for a man's wife. Every preparation was made and every precaution observed that haste and surroundings permitted. The life of the woman was saved and recovery was uneventful. A very moderate fee was charged but the man failed to pay and the account was sent to the Bureau. In reply to one of the letters sent by the Bureau the man offered to pay less than half of the fee. He condemned the doctor as unskilled and incompetent and stated as evidence that he had administered ether instead of chloroform.

A woman brought her son to the office of the Bureau to exhibit an arm which had been broken and for the care of which she was asked to pay a very reasonable fee. The surgeon had found it necessary to use plates and there was a scar but the alignment and function of the arm was perfect. To a statement that the boy seemed to have perfect use of his arm she replied, "Oh, he can use it just as well as ever, but I would rather have it stiff or crooked than have that scar on it."

One would rather prefer to do business with the old Irishman who had two children sick with diphtheria. A doctor was called and cared for the children until they were well. A bill for \$22.00 was rendered to which no attention was given. When more urgent demands were made the old

man presented a bill against the doctor for \$28.00 and threatened to bring suit if the difference was not paid at once. He had charged two dollars for four trips he had made after the doctor or after medicine and he had charged \$4 each for five nights that he sat up all night to give the medicine to the children.

It seems impossible for some people to understand why a doctor's fee list should be flexible—they seem to think for instance, that the fee for obstetrical attendance should always be the same.

A well known obstetrician was called to care for a woman during confinement. Many difficulties were met during the delivery and the subsequent history of the case was rather turbulent, but the woman recovered and the husband paid the fee charged without a murmur. Some months later several visits were made to the mother and babe for which the usual charges were made. The husband refused to pay. To the Bureau's letter he replied that he would not pay the account because the doctor had overcharged him for the services previously rendered. He was very well satisfied until he learned from a friend that the same doctor had only charged half as much when his wife was confined.

In every man who allows an account to run three months without any effort to pay there are the potential elements of a dead beat and the longer the account remains unpaid the more he resents the obligation and the more bitter he becomes in denouncing the man to whom he is obligated.

R

New Building a Certainty

The City of Rosedale, and the Faculty and Alumni of the School of Medicine of the University of Kansas have presented to the state the site stipulated by the Committee appointed by the last legislature. The plans for the expenditure of the \$200,000 appropriated can now be made. The cost of this gift was \$65,000; the City of Rosedale voting \$35,000 in bonds by a majority of 7 to 1—the vote being 1175 for the bonds and 175 against. The remainder of the money was raised by the Alumni of the University. The friends of the school may well be delighted and encouraged by the enthusiasm and generosity by which this drive was carried to success.

The new site is undoubtedly the best one available in the entire metropolitan area for the purpose of the erection of a School of Medicine, with its attendant, hospitals, laboratories, and dispensaries. It is high, conveniently located to the car lines, and

contains nearly thirteen acres, about three-quarters of a mile south of the present site. A survey will be made of it immediately; and a "lay-out", looking far into the future, will be made before any construction is begun. If possible, it is intended to employ experts to lay out a complete plan; so that any building erected by money appropriated by the state may fit into a definite scheme. The \$200,000 now available will be spent in accordance with this plan.

It is to be hoped that in the near future the School of Medicine of the University of Kansas will have the equipment and buildings which will permit it to compare favorably with the medical schools conducted by the Universities of neighboring states.

R

ETCETERA

Ether-oil colonic anesthesia is used by some surgeons. It is claimed to be more satisfactory in certain cases than inhalation anesthesia. Theoretically, at least, it is the ideal anesthetic in face and neck operations.

Biometry is the measuring stick used by insurance companies to determine the expectation or probable duration of life. The yard stick used is the length of statistics.

The expired air of a healthy man contains five or six per cent less oxygen than inspired air, and this percentage of deficit is nearly the same during physical exercise.

To ventilate a room through the window and at the same time protect the inmates from drafts of air, tack a board to the inside of the window frame fitting it closely to the sill. The window can then be raised one-half or two-thirds the width of the board which will deflect the air and the room will be ventilated in safety to its occupants.

According to newspaper reports, Dr. J. R. Brinkly, who managed in some way to get a good deal of notoriety in his exploitation of the goat gland fad, has departed from Milford and at last reports there was some worry and uneasiness over assets and liabilities. It may be just as well to correct an impression that seems to exist somewhere and state positively that the gentleman referred to is not a member of this Society.

Miss Martha Hardin has recently been appointed Superintendent of Bell Memorial Hospital and took charge of that institution on June 15.

A report from the City Health Officer shows that during the six months ending

June 30 there were 434 deaths in Topeka and that during the same period there were 570 births. During this period there were reported 507 cases of measles, 457 cases of whooping cough, 389 cases of chicken pox, 92 cases of small pox, 31 cases of scarlet fever, 11 cases of typhoid, 23 cases of diphtheria, 1600 cases of influenza and 99 cases of pneumonia. There were reported during this period 59 cases of tuberculosis.

There were 30 deaths from cancer, 23 deaths from cerebral hemorrhage, 74 deaths from heart disease and 23 deaths from tuberculosis.

In reporting a number of cases of manic depressive psychosis which occurred during convalescence from influenza, Rossi attributes the psychosis to suprarenal insufficiency. He states that the suprarenal insufficiency is caused by influenza, and that it is a well known fact that influenza affects the suprarenals. He claims also to have found suprarenal insufficiency in cases of manic depressive psychosis that had not had influenza.

In a case of marked mammary hypertrophy following influenza, Patel, Bordeaux, reduced the hypertrophy with subcutaneous injections of human milk. The injections were given at ten day intervals and consisted of 5 c. cm. each. Improvement was observed after fifteen days and in a few weeks the breasts appeared like deflated balloons.

Of six cases of tetanus given the Blake magnesium sulphate treatment five recovered, and of five treated without it four died, according to a report by Reverdin and Beuf. This treatment consists in lumbar puncture, the withdrawal of 10 to 15 c. cm. of cerebro-spinal fluid and the injection of 10 c. cm. of warm sterile magnesium sulphate in 10 per cent solution. Injections are made daily until recovery is sure. The effect of the drug is anesthetic and paralysing so that the spasms and convulsions are controlled.

Antitetanus serum, morphine and chloral were also used in the cases reported.

It is reported that the California State Medical Association, at its meeting in Santa Barbara, adopted resolutions substantially as follows:

1. That the administration of an anesthetic is always the function of a legally qualified medical practitioner.
2. That the administration is best performed by physicians specially trained or who have made a specialty of this subject.

3. That wherever available, hospitals and public institutions, where anaesthetics are administered, employ only physicians as anaesthetists.

4. That this Society condemns, under all circumstances, the training and qualification of lay persons as anaesthetists.

5. That no hospital shall be deemed to have acceptable standards which charges a fee for an anaesthetic unless such anaesthetic has been administered by a legally qualified physician.

Animal experimentation has provided vaccines, bacterins, and antitoxic serums; it has aided in the development of new methods of surgery and of reliable means of diagnosing infectious diseases; it taught us how to use gases during the war and how to defend our soldiery against them. In the absence of such knowledge the recent war would have cost additional thousands of lives and would have produced many additional thousands of cripples.

If animal experimentation had not taught us how to cure many diseases of the lower animals and how to suppress appallingly destructive live stock plagues, the hunger and starvation prevalent in some parts of the world would be practically universal. Experiments with animals have provided means for controlling human diseases like small pox, Asiatic cholera, bubonic plague, malaria, typhus fever, etc., in addition to yellow fever already mentioned.

In any emergency where it is deemed advisable to use injections of camphor oil one should be sure that olive oil, or at least a vegetable oil, and not paraffin oil, is used as the solvent. Hook and Wander have reported six cases in which tumours appeared several months after injections of camphor oil. The tumours appeared generally on the arms, but occasionally on the shoulders, thighs and breasts. They were doughy or concrete-like infiltrations, varying from the size of a walnut to that of an orange. They are of the same character and presumably from the same cause as the paraffinomas observed some years ago.

Carnot's sham feeding test, as stated by Dupuy, consists in catheterizing the stomach, or completely emptying it if there is gas, then giving the patient an appetizing meal of ten minutes duration, which he should masticate thoroughly, spitting out all the food and saliva. He is allowed to rest ten minutes, spitting out all the saliva secreted. The catheter is passed again. From 60 to 90 c. cm. of clear fluid is withdrawn.

Free hydrochloric acid varies from 1.64 to 1.80 and total acid from 1.80 to 1.96. In seven out of eight cases of cancer the total acidity was below 1 and there was absence of free hydrochloric acid. In prepyloric and pyloric ulcer, and in dyspepsia following gall stones there was increased secretion and increased hydrochloric acid. In duodenal ulcer there was increased secretion. In nervous dyspepsia the secretion was variable and in tabes it was often absent. In tuberculosis with anorexia the secretion usually seemed to be normal, but there was diminished fermentation.

In one of the popular magazines there recently appeared a story of a man who lost himself in a jungle in a plague stricken section of South America. He tramped for days without food and without a drink. He developed yellow fever, warte fever, bubonic, beriberi, blackwater fever, small pox and a dozen other diseases. But he kept his senses and knew enough not to drink the poisoned water though his mouth was parched and his tongue swollen, kept on travelling, waded a river filled with dead and bloated bodies of plague victims, finally reached a village where most of the people were dead with the plague, was cared for and recovered his normal health and vigor.

He was sure some sick man, but what about the fellow who wrote the story?

There are in the United States approximately six hundred sanatoria for the treatment of tuberculous patients, and about 120,000 cases are cared for in these institutions annually. The Metropolitan Life Insurance Co. asks if the results justify the cost of construction and upkeep of these institutions. It claims that no satisfactory data have been furnished and that only a very few of the best of these institutions have attempted to keep in touch with cases after they have been discharged and the reports from these are not very favorable. In the best cases, entered as incipient and discharged as arrested, the subsequent mortality is from three to four times as great as that of the population at their respective ages. It is suggested that a central bureau be established which shall follow up the course of the cases discharged from all the sanatoria.

To the weather man's daily duty is now added air charting for air men. The weather man has nothing on the doctor man. Soon after the bicycle face was recognized in medical literature the motorcycle and auto

faces were upon him, the latter being the bicycle and horse racing faces accentuated. Now comes the aerial and wireless faces. It would seem that these diversities would lead to complexities, but, on the contrary, they merge automatically into the political, christian science and telepathic face or trinity and are easily diagnosed. There will be other types of faces added to the medical curriculum of diagnosis but it is a grave question if the Hippocratic face ever loses out in medical nomenclature.

Carbon-monoxide has an avidity for hemoglobin three hundred times that of oxygen, hence it kills by reducing the oxygen carrying power of the blood. Carbon-monoxide is the most poisonous gas exhausted from a gasoline engine. Gasoline affects a man like ether, except an overdose causes convulsions by irritating the cerebral cortex.

In an experiment it was found that men working in an atmosphere of eight parts of carbon-monoxide to ten thousand parts of atmospheric air became ill with headache. When two parts more of carbon-monoxide were added to this same volume of air it made the most resistant of the men miserable and unfit for work for several hours.

Persons living over a garage or campers out who sleep in an auto and have the whole machine covered over with canvas may be made sick, possibly die, from inhaling the escaping gasoline vapor from a leak or an uncovered opening in the gasoline tank.

A correspondent of the National Anaesthesia Research Society, writing of the conference of anaesthetists held in connection with the Fifth Annual Convention of the Catholic Hospital Association at St. Paul, says it was decided that ether with nitrous oxid-oxygen is the safest anaesthetic. Chloroform was in disfavor because of the large number of casualties from anaesthesia said to result from its use.

For many years malaria has caused a loss of six million dollars, and, among the negroes alone, a loss of over a million and a half working days each year in South Georgia. It infects from twenty to one hundred per cent of the people in the communities, and caused the death of 800 people yearly.

Recently the American Red Cross, in co-operation with the State Board of Health, the Georgia Association, the U. S. Public Health Service, and several large corporations, has undertaken an extensive anti-malaria campaign, moving pictures, lectures and the press have all been utilized in call-

ing the attention of the people to the importance of destroying the mosquito and all its breeding places.

Among the Rumanian peasants, and particularly among the gypsies, there is a superstition that the death of a child is caused by an evil spirit having entered the body of the mother, and that beating the mother will drive out the devil and cure the child. Consequently these peasant mothers beat themselves frightfully when one of their children is ill.

Recently a doctor attached to the American Red Cross commission was called to see a Rumanian gypsy woman. She lay on a thin straw mat on the bare ground, with nothing but a tattered tent to shelter her from the cold wind. He found that she was suffering from pneumonia, but he also noticed numerous bruises on her chest, and upon inquiry was informed through an interpreter that one of her children had died two weeks earlier.

The twenty-fifth annual meeting of the American Academy of Ophthalmology and Oto-Laryngology will be held in Kansas City, Mo., October 14, 15, 16, 1920 at the Hotel Muehlebach. The local members of the Academy and their friends are making arrangements to give all those who attend a pleasant time. Physicians engaged in these specialties are cordially invited to attend.

Palestine's first medical journal, "Harefooah," (Medicine), has just made its appearance, published by the Jewish Medical Association of Palestine. The journal is a quarterly and its first issue is dedicated to the memory of the Jewish physicians and nurses, who "lay down their lives in the years of upheaval in the Holy Land."

Chaulmoogra oil and preparations made from it are at present extensively employed and seem to produce amelioration in the majority of lepers to whom it has been administered persistently. Investigation has shown that chaulmoogra oil contains bactericidal substances that are one hundred times more active than phenol, and that this bactericidal action is specific for the acid fast group of bacteria to which the causative organism of leprosy belongs. The product is inactive against all other organisms studied. On the other hand, it has been shown that sodium mohuate and the fatty acids of cod liver oil do not have a similar action in tuberculosis which is also due to an acid fast bacterium. The value of

chaulmoogra preparations in tuberculosis remains to be demonstrated, and their clinical trial should await their experimental investigation. The indiscriminate use of drugs in tuberculosis may arouse false hopes and may not be without danger to the patient. (Jour. A. M. A., June 5, 1920, p. 1578.)

What is the Therapeutic Value of the Hypophosphites?—A research conducted by the Council of Pharmacy and Chemistry shows: There is no reliable evidence that they exert a physiologic effect. It has not been demonstrated that they influence any pathologic process. They are not foods. If they are of any use, that use has not been discovered. The hypophosphites were introduced into medicine by Churchill, who advanced the theory, long since discarded, that the so-called tuberculosis diathesis was due to a phosphorus deficiency. It is now known that little phosphorus, if any, is assimilated from hypophosphites—far less than from phosphorous compounds of ordinary foods. As a result of the power of advertising, many physicians still prescribe hypophosphate combinations (Jour. A. M. A., June 12, 1920, p. 1661).

Quality of Acetylsalicylic Acid.—The following brands of acetylsalicylic acid have been found of satisfactory quality and are in New and Nonofficial Remedies: Acetylsalicylic Acid-Heyden, Acetylsalicylic Acid-M. C. W., Acetylsalicylic Acid-Merck, Acetylsalicylic Acid (Aspirin)-Monsanto, Acetylsalicylic Acid-P. W. R., Acetylsalicylic Acid-Squibb, and Aspirin-L. and F. An examination made in the A. M. A. Chemical Laboratory two years ago showed that the product supplied as acetylsalicylic acid was of equal quality with the German made Aspirin Bayer. The Aspirin Bayer now made in America and exploited with misleading claims is controlled by the Sterling Products Company, which sells easearcts, danderine, etc. (Jour. A. M. A., June 12, 1920, p. 1664).

Formula for Mouth Wash.—Castile soap, dried and granulated, 6.00 gm.; benzosulphnid, 0.20 gm.; basic fuchsin, 0.002 gm.; oil of cassia, 0.50 c. c.; oil of peppermint, 0.50 c. c.; oil of cloves, 1.00 c. c.; alcohol, 75 c. c.; water to make 100 c. c. A few drops added to water to be used as a mouth wash. It will be noted that except for the volatile oils present, antiseptics are conspicuous by their absence. It is impossible to disinfect the mouth. Mere bacteriostatic (germ growth inhibitive) influence of antiseptics can be of value only as long

as the agent is present; and the time that one is willing to keep the mouth full of fluid is limited. The chief virtue of mouth wash preparations lies in their esthetic qualities, their pleasant appearance, odor and taste, which induces their use (Jour. A. M. A., June 19, 1920, p. 1732).

Since the standardization of medical colleges was made a reality, with the lengthening of the course of instruction and the necessary increase in cost to the student, there has been a very marked decrease in the number of medical schools, in the number of students in attendance and in the number of graduates.

In 1906 there were one hundred sixty two medical colleges in the United States; in 1919 there were only eighty five recognized schools. In 1904 there were 28,142 students attending the various medical colleges; during the session of 1918-19 there were 13,052 students taking the medical course. In 1903 there were 5,698 graduates from all the medical colleges; in 1919 there were only 2,656 graduates.

A dislike in children for certain kinds of food changes, as a rule, to a liking for these same foods in adolescent or in adult life. The sense of taste changes to meet the tissue demands for a food to build up a harder, tougher, more resistant physical organism, to endure and withstand the more strenuous life of manhood. These physical changes in taste are typified in the desires, pleasures and enjoyments in manhood, contrasted with the desires and pleasures of childhood.

R

COMMENTS

BY THE PRODIGAL

M-I-L-K

Josh Billings said the best thing he ever saw on milk was cream. Milk is the food nature provides for the infant mammalia. This food is to be used exclusively for the first few weeks time after birth in the case of the rabbit, to a couple of years time in that of man. After these approximated periods of time, milk as a food is to be used inclusively, that is with other foods. Milk contains all of the elements necessary to support animal life. But when the actual strenuous physical life is on, nature is equal to the occasion and is never taken by surprise. She has provided food for the occasion, and the desire in the animal for the different kinds of food and the internal laboratory to prepare them for

metabolism. From one cause or another the milk of the human mother disagree with her infant more frequently than the milk of the brute animal disagree with its young.

One cause of this difference is, probably, that man is supposed to be endowed with reason and has knowledge. This knowledge enables him to cut across lots and to save time and increase trouble for himself. Its a short cut and man can show up the crude way nature does things.

Conclusions: 1st. Study to keep on Nature's side and know how she does things and do likewise.

2nd. Most of the sickness in infants is alimentary in origin and is caused by the quality of the food not being normal, the quantity of the food being in excess or not properly timed; one or all of these conditions may be present.

3rd. Treatment must be given the sick infant, but if the human laboratory that prepared the food for metabolism is not looked after and kept in normal condition, they who wait for the child's recovery wait, too often, in vain.

4th. Nature will not be camouflaged nor tolerate temporizing.

THE CALORY

Not long ago the calory headed the dietetic procession. The balanced ration was the ideal for man and beast. Its food value being measured by the number of calories in the ration. The theory was founded on the assumption, evidently, that heat is life and cold is death. Whereas heat and cold are conditions of life or not life.

The discovery of the value of the heat unit in food was an advance in ferreting out nature's laboratory secrets in food values. But the dietetic scientist took too much for granted when he discovered the calory in food and what he thought it did. Judging from his actions he concluded that he had found out nature's secret in maintaining life. But he is now disillusioned. However the scientist in his failure to find it all out has increased his sum of knowledge and moved science forward another peg and is encouraged to keep on trying to find out what is to be known.

THE VITAMINE

The vitamine has nosed the calory out of first place in the dietetic menu. Like life the composition of the vitamine is not known. It is the peg in food stuffs which is essential to normal metabolism and hence to life. A vitamine is one of a group of substances of unknown composition, pres-

ent in very small amount in natural food stuffs which are essential to normal metabolism and the lack of which in the dietary causes beriberi and other deficiency diseases.

The word vitamine is defined as being derived from the Latin words **vita**-life and **amine**—a substance which may be derived from ammonia by the replacement of one or more of the pydrogen atoms by hydro-carbon radicals.

AQUATIC GYMNASTICS FOR TUBERCULOSIS

Aquatic gymnastics is a new treatment for the tubercular patients. Diving is the therapeutic agent recommended. The excess complimentary air inhaled before takeing the plunge expands the lungs and flushes the pneumatic apparatus. The vesicles are inflated, the cells renovated and rejuvenated by high blood pressure, the bacilli killed and eliminated.

Hutchinson, Kansas, and San Pedro, California, each is reported to have an aquatic hospital for the treatment of tubercular patients.

In addition to aerating and cleansing the patient inside, the frequent ablutions keeps the outside aseptic and is a double header therapeutic measure.

Hutchinson and San Pedro have the edge on the average town or city by nature adding salt to therapeutic menu.

The treatment will be popular because of the fun in taking the medicine. For the patient will have had the pleasure the diving afforded, live or die. The athletic treatment does away with the rest treatment; the latter treatment being more or less confining.

Moral: There seems to be nothing so good but what there is something better. And as knowledge increases it breeds trouble.

QUESTIONS—FOR THE OTHER FELLOW

Have any of you taken a fling at youth yet? If not do not. Time will do its perfect work and relieve the efflatus.

Does your body hang right? That is, do your appendages and hangers on that are supported by your spinal column do their part in posturing your back bone and help to keep it in normal position? Or have you acquired the "habitus enteropticus", commonly known as the asthenic or consumptive droop? Do you believe that "the perfect physical poise of the body keeps the muscular, circulatory and nervous systems in harmonius relationship and adjusted for the best achievement"? Do you

believe that posture of the body is a mark of differentiation between man and brute? Do you believe that perfect physical posture, or poise, of the body tends toward mental and moral development and power for greater efficiency? And that the slouchy consumptive, asthenic stoop and droop tends toward the original type and is evolution backward?

How many of us know how to walk, stand, sit or lie, hygienically? If we do how many of us practice it—on ourselves, our patients, or our children?

R

SOCIETIES

Central Kansas Medical Society

The regular quarterly meeting of The Central Kansas Medical Society was held on June 23, in the Central National Bank Building at Ellsworth. The following members were present: Drs. E. A. Miller, Bunkerhill; Carl Cramm and F. S. Hawes, Russell; J. B. Carter and L. V. Turgeon, Wilson; Geo. F. Davis, Kanapolis; Geo. F. Zerzan, Holyrood; A. O'Donnell, W. J. Scott, E. Z. Hissem, B. H. Mayer, H. S. O'Donnell, Ellsworth.

The following program had been arranged, but on account of the bad roads some of the papers were not present.

Twin Pregnancy (Lues), Dr. Geo. F. Davis, Kanapolis.

Lethargic Encephalitis, Dr. Geo. F. Zerzan, Holyrood.

Dermatoses, Dr. J. B. Betthauser, Hays. Radium, Dr. Ralph Hissem, Wichita.

Duodenal Ulcer, Dr. W. A. Phares, Wichita.

Paper, Dr. John W. Perkins, Kansas City Mo.

Following the program a banquet was served at the Baker House. The next meeting will be held in Wilson on the second Tuesday in September.

Leo. V. Turgeon, Sec'y.

Golden Belt Society

The Golden Belt Medical Society held its regular quarterly meeting at Tescott on Thursday, July 1. The session began at four o'clock. Dr. Alfred O'Donnell read a paper on "Intestinal Obstruction" and Dr. Karl A. Menninger read a paper on "Fits". After the reading of the papers there was a clinical demonstration.

Supper was served at seven o'clock by family of Dr. Vermilion, under the direction of Miss Vermilion who is a Domestic Scientist.

Ninth and Tenth Districts

A joint meeting of the component medical societies of the ninth and tenth districts was held in Colby on Tuesday, July 20.

The program began at 10:00 a. m. and the following papers had been announced.

Fractures of the Elbow, C. D. Blake, Hays.

A Paper by John Outland, Kansas City, Mo.

The Acute Abdomen, W. C. Lathrop, Norton.

The Venereal Peril, B. K. Kilbourne, Topeka. (Illustrated by motion pictures.)

The Glands of the Internal Secretions in Their Relations to Health and Disease, W. W. Duke, Kansas City, Mo.

The meeting was arranged by Dr. C. S. Kenney, Councilor for the Ninth iDstrict, and Dr. D. R. Stoner, Councilor for the Tenth District.

Sumner County Society

The Sumner County Medical Society met at Wellington on Thursday evening, July 29.

The program consistel of a paper on "Crippled Children" by Dr. C. B. Francisco, Kansas City, Mo., a general discussion on cases presented led by Drs. Goelitz, Shelly and Caldwell.

A Crippled Children's Clinic was held at which thirty cases were presented was conducted by Dr. Francisco in the Red Cross Clinic Rooms.

Finney County Medical Society

The July meeting was held with Dr. G. F. Johnson of Lakin, Kansas on the eve-ning of the 27th.

Supper first, held at the local hotel, was greatly enjoyed and the members repaired to the home of Dr. Johnson for the meet-ing. The program follows:

General Subject: The Kidney.

"Embryology, Anatomy and Physiology of the Kidney", Dr. Chas. Rewerts.

"Acute and Subacute Interstitial Nephritis", Dr. G. F. Johnson.

"Chronic Interstitial Nephritis", Dr. A. L. Brown.

Leader of Discussion: Dr. S. Bailey.

General and energetic discussion followed.

The remainder of the year will follow a program in which there will be symposiums of the different organs and the general plan will be as above for the kidney.

R. M. Troup, Sec.

C. & C. Bureau

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accounts, give the name in full if possible, the occupation if known or can be learned, the correct address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

Present addresses wanted for the following:

Last known address

Baird, Zeb. Chetopa, Kans.
Benning, Clarence E. 2034 N. Walnut, Kansas
City, Kans.
Pinkley, Clarence. 811 Kans. Ave., Topeka, Kans.
Blue, Mrs. Myrtle. 813 Monroe, Topeka, Kans.
Boerner, Mrs. George. 2031 Hallcock, Kansas
City, Kans.
Bowe, J. P. 527 Monroe, Topeka, Kans.
Bowers, J. Clark. 1731 Garfield, Kansas City, Kans.
Brainard, F. D. 1920 N. Lawrence, Wichita, Kans.
Brassfield, G. M. Council Grove, Kans.
Brooks, Joe. 525 N. Emporia, Wichita, Kans.
Burk, James. Chetopa, Kans.
Burns, Claude A. Elk Falls, Kans.
Coffeyville, Kans.
Bush, Frank. Chetopa, Kans.
Carlin, J. J. Metropolitan Life Ins. Co., Topeka, Ks.
Cheeben, Ralph. Grenola, Kans.
Cook, H. O. Police Dept., Topeka, Kans.
Cottrell, R. C. R. R., Topeka, Kans.
Creeach, R. L. Coffeyville, Kans.
Crosser, Jasper. Iowa
Davis, Mrs. Minnie. 417 Tyler, Topeka, Kans.
Davis, Oscar. 127 Lafayette, Kansas City, Kans.
Dollar, Theodore. Chetopa, Kans.
Fairhurst, Edw. Atchison, Kans.
Ferguson, Geo. 2503 N. 5th St., Kansas City, Kans.
Fisher, Mrs. Wm. R. 1 Box 28, Topeka, Kans.
Freudle, Everett. c-o Santa Fe, Topeka, Kans.
Fromish, W. W. 1304 N. Water, Wichita, Kans.
Gibson, Will. 104 E. Larmie, Atchison, Kans.
Gillstrap, Phil. 619 W. 6th. St., Topeka, Kans.
Grant, Netter W. 1950 N. 3rd St., Kansas City,
Kans.

Harrison, G. D. Marysville, Kans.
Hall, W. M. South 14th St., Kansas City, Kans.
Hart, T. J. Redfield, Kans.
Hayes, A. L. Cedar Vale, Kans.
Jacobs, Earl. Lawrence St., Topeka, Kans.
Johnson, S. S. 1616 Clay St., Topeka, Kans.
Karnes, Wm. Chetopa, Kans.
Neodesha, Kans.

Kelley, O. W. Moline, Kans.
Lakey, L. Chetopa, Kans.
Lamb, E. P. Moline, Kans.
Lee, James. 507 S. 22nd St., Parsons, Kans.
Letcher, E. 1911 N. Mills, Kansas City, Kans.
Lewis, Bert. 322 N. Washington, Wichita, Kans.
Littrell, John. Leon, Kans.
McClean, B. H. 1526 N. Quincy, Topeka, Kans.
McCoy, E. F. Garden City, Kans.
Metzpa, E. J. 220 N. Lawrence, Wichita, Kans.
Miller, J. I. Wallace, Kans.
Milligan, Mrs. E. E. Eureka Springs, Arkansas
Morrow, G. W. Redfield, Kans.
Morton, G. F. Partridge, Kans.
Haven, Kans.
Pattison, Urban. Moline, Kans.
Penick, Frank. 1200 S. Emporia, Wichita, Kans.
Perkins, Mrs. Jennette. 718 Rural St., Emporia, Ks.
Phillips, T. C. Cottonwood Falls, Kans.
Reed, W. Ernest. 1055 N. Main St., Wichita, Kans.
Care Coleman Lamp Co.
Rogers, A. J. 250 N. Emporia, Wichita, Kans.
Schmidt, Wm. 551 E. Gordon St., Topeka, Kans.
Sewell, John. 605 State St., Kansas City, Kans.
Seymour, Ray. 1600 E. 8th St., Kansas City, Mo.
Shepard, Monroe. 316 Lafayette, Kansas City, Kans.
Snepp, Mrs. Bessie. 6 Neosho St., Emporia, Kans.
Sondergard, H. O. Metropolitan Life Ins. Co.,
Topeka, Kans.
Starner, W. M. Emporia, Kans.
Sturdy, A. O. c-o Santa Fe, Topeka, Kans.
Taylor, J. S. 520 S. 2nd St., Arkansas City, Kans.
Twombly, Leroy. Dunavant, Kans.
Birmingham, Kans.
Vail, G. E. 706 Lakeview, Emporia, Kans.
Americus, Kans.
Vaught, L. 114 E. 14th St., Topeka, Kans.
Walker, M. B. 2612 N. 5th St., Kansas City, Kans.
White, L. W. 404 Greeley, Kansas City, Kans.
Whitten, C. C. Carpenter, Kansas City, Mo.
Wilson, U. G. 424 Paramore Ave., Topeka, Kans.
Wood, D. W. 251 N. Main St., Wichita, Kans.

B — BOOKS

Advanced Lessons in Practical Physiology, for Students and Practitioners of Medicine

by Russell Burton-Opitz, M. D., Ph. D., Associate Professor of Physiology, Columbia University, New York City. Octavo of 238 pages with 123 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$4.00 net.

The author has supplied here a very excellent course of lessons in physiology. He has arranged the facts to be presented in logical sequence with such experiments and demonstrations as will be of greatest value to the student. The course is planned to cover a period of one hundred and eighty hours in the school curriculum. The author has not only somewhat simplified the teaching of physiology but has made possible a much greater efficiency.

Human Parasitology, with notes on Bacteriology, Mycology, Laboratory Diagnosis, Hematology and Serology

by Damaso Rivas, M. D., Ph. D., Assistant Professor of Parasitology and Assistant Director of the course in Tropical Medicine, University of

Pennsylvania, Octavo Volume of 715 pages with 422 illustrations and 18 plates most of which are in colors. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$8.00 net.

Parasitology is a subject which has been growing in interest to the medical profession and growing rapidly in importance to the economics of the world. Men who have spent the best of their lives in the study of parasitic diseases realize more fully than do the general practitioners the extensive field that is covered by these diseases. Dr. Rivas is eminently fitted to write upon the subject and one may feel that in this book the facts presented are authoritative and the conclusions are drawn from a wide experience.

International Clinics

Volume II, Thirteenth Series—1920; A quarterly of illustrated clinical lectures and specially prepared original articles on medical subjects. Edited by H. R. M. Landis, M. D. Published by J. B. Lippincott Co., Philadelphia.

A department of industrial medicine and industrial surgical clinics by Paul B. Magnusen, M. D., also a department of pediatrics by John Foot, M. D., Washington, D. C. have been added to the International Clinics and will appear as a regular feature hereafter.

In this number Lloyd Thompson has a very complete, and very finely illustrated paper on the skin lesions of syphilis. There is also a very interesting paper by Leon Bailly of France on the occlusions of the arteries of the limbs in diphtheria. There are also many other excellent papers that deserve particular mention if space permitted.

Blood and Urine Chemistry, Newer Methods of

by R. B. H. Grandwohl, M. D., Director of the Grandwohl Laboratories and Director of the Pasteur Institute, St. Louis; and A. J. Blaivas, formerly Ass't. in same and Asst. in Chemical Laboratory, St. Luke's Hospital, New York City. Second Edition with seventy five illustrations and four colored plates. Published by C. V. Mosby Co., St. Louis. Price \$5.00.

The purpose of this book is to tell us how to do the things that are so necessary to be done if one expects to make careful diagnoses and carry to a successful issue modern methods of treatment. Grandwohl, from his long and very extensive experience is peculiarly well fitted to tell us just what we ought to know about these things. The second edition was necessary to bring to date many of the procedures which have been and still are improving with greater

experience and knowledge. The methods given are mostly those which have been used and proved satisfactory in the Grandwohl Laboratories. A considerable space is devoted to the subject of basal metabolism.

The Surgical Clinics of Chicago

Volume IV Number III (June 1920.) Octavo of 204 pages, 79 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Published Bi-Monthly: Price per year; Paper \$12.00; Cloth \$16.00 net.

In the June number of the Surgical Clinics, Kanavel has a clinic on empyema with some excellent illustrations of the operation for the obliteration of the empyema cavity. Strauss has a clinic on perforated gastric ulcer and one on intussusception. Bevan presents a clinic on the repair of the common bile duct. Gatewood has a clinic on tuberculous glands of the neck which should interest every practitioner.

Manual of Psychiatry

Edited by Aaron J. Rosenthal, M. D., Clinical Director, Kings Park State Hospital, N. Y., Lieutenant Colonel, Officers' Section, Medical Reserve Corps, U. S. Army. Publishers; John Wiley & Sons, Inc., New York. Chapman & Hall, Limited, London, 1920.

Psychiatrists have in general ignored the general practitioner. Everyone recognizes that mental diseases are of frightful frequency and that they deserve peculiar attention. But the general practitioner has become much discouraged trying to glean from the ambiguous and ponderously written text books the elementary facts that he desires for practical application.

Various authors have written excellent standard text books from the standpoint of the specialist. Not a single author at the present time has achieved a text book on mental diseases appealing to the general practitioner.

According to the preface, this book like others, is intended not for the general practitioner but for the psychiatrist. This is unfortunate for the book's greatest opportunity is thus lost. There are many new points of value such as psychiatric social work written by Mark C. Jarrett of Boston, the abolition of the word insanity, and an able presentation of Rosenthal's discoveries in association testing. These however are points quite familiar to every alert psychiatrist.

But one can also criticize the book on points of technical detail. One of the most serious criticisms would be that the auth-

or's choice of authority and reference is in many places faulty. For example Paul Schuster has written a classical book on mental symptoms of brain tumor which is not mentioned but instead only a reference to two much less authoritative Frenchmen. Again he omits all mention of Southard under the discussion of hallucinations on the basis of organic foci. Infectious diseases as causes of mental trouble are wholly omitted. Much more space is given to alcohol than the present situation justifies.

On the whole then the book fails to be satisfactory to the general practitioner, because it was not written for him and fails to be wholly satisfactory to the psychiatrist because it is not technically correct. Nevertheless it is a book of average worth with some very valuable features.

Regional Anesthesia (Victor Pauchet's Technique)

by B. Sherwood-Dunn, M. D. Officier D'Academie; Surgeon (colonel) service de Sante Militaire de Paris; Physician to the Cochin Hospital. With 224 figures in the text. Published by F. A. Davis Company, Philadelphia and London. Price \$3.50.

Pauchet is recognized as the leading exponent of regional anesthesia in France and the author of this book has given a resume of his methods. Regional anesthesia has been gaining ground for the past five or six years and its most enthusiastic adherents claim that not only minor operations but all major operations can be performed in this way. There have been no deaths from regional anesthesia since weak solutions of cocaine or the less toxic agents have replaced the strong solutions that were formerly used. If the nerves have been properly anesthetized, the anesthesia continues complete for from one and one-half to two and one-half hours. Excellent illustrations are used to make the technique more clear.

R Recent Licentiates

The secretary of the Kansas State Board of Medical Examination and Registration reports the following as having been granted licenses at the examination held in Kansas City June 15.

By Examination

Bonvy, L. B., Univ. of Pennsylvania, Ottawa, Kans.
 Church, A. L., Univ. of Kansas, Pittsburgh, Kans.
 F. E. Coffey, Univ. of Kansas, Kansas City, Kans.
 Conner, S. W., Univ. of Kansas, Atchison, Kans.

Cozier, L. W., Univ. of Kansas, Wakarusa, Kans.
 Ferguson, E. R., Univ. of Kansas, Garnett, Kans.
 Hadley, E. E., Univ. of Kansas, Alton Kans.
 Hertzler, A. H., Univ. of Kansas, Kansas City, Mo.
 Hastings, G. R., Univ. of Kansas, Rosedale, Kans.
 Kehl, C. C., Univ. of Kansas, Rosedale, Kan.
 Krause, O., Univ. of Kansas, Kansas City, Mo.
 Marquis, G. S., Univ. of Kansas, Rosedale, Kans.
 Mock, S. D., Univ. of Pittsburg, Pittsburg, Pa.
 Mowery, G. E., Univ. of Kansas, Scott City, Kans.
 Ogg, F. W., Univ. of Kansas, Douglas, Kans.
 Pace, J. D., Univ. of Kansas, Kansas City, Mo.
 Pettersson, E. C., Univ. of Kansas, Beloit, Kans.
 Patrick, Ruth, Univ. of Kansas, Randall, Kans.
 Ruble, M. C., Univ. of Kansas, Parsons, Kans.
 Scholes, H. C., Univ. of Kansas, Bonner Springs, Kans.
 Stivison, R. E., Univ. of Kansas, Lyndon, Kans.
 Sullivan, H. B., Univ. of Kansas, Langdon, Kans.
 Thiele, G. H., Univ. of Kansas, Washington, Kans.
 Walter, E. K., Univ. of Kansas, Kansas City, Mo.
 Winscott, A. E., Univ. of Kansas, Higgins, Texas.
 Wolfe, J. E., Univ. of Kansas, Rosedale, Kans.

By Reciprocity

Hamilton, H. A., Raymond, Kans. (Missouri.)
 Johnson, E. W., Coffeyville, Kans. (Missouri.)
 Kunee, F. E., Tipton, Kans. (Illinois.)
 Saforik, L. R., Haven, Kans. (Nebraska.)
 McKinley, W. E., Guernsey, Wyo. (Wyoming.)
 McCog, G. P., Franklin, W. Va. (W. Virginia.)
 McGinnis, C. S., Sedalia, Mo. (Missouri.)
 Miller, M. M., Arkansas City, Kans. (Missouri.)
 Nevin, J. L., Spearville, Kans. (Iowa.)
 Perkins, C. H., Chicago, Ill. (Illinois.)
 Thomson, W. E., Pratt, Kans. (Ohio)
 Smith, P. C., Kansas City, Mo. (Missouri.)
 Bolton, D. W., Paxico, Kansas. (Nebraska.)
 Randall, H. T., Lawrence, Kans. (Missouri.)

Specific Nature of Hemolytic Streptococcus of Scarlet Fever

Studies of the specificity of the remolytic streptococcus in scarlet fever, especially in regard to opsonification, since agglutination of streptococci is uncertain, are reported by Ruth Tunnicliff, Chicago (Journal A. M. A., May 15, 1920). Hemolytic streptococci, obtained from various sources were used. Of the hemolytic streptococci isolated from the throat and the complicating lesions of early cases of scarlet fever, all gave marked phagocytosis with the immune sheep serum except two mannite fermenters, the point of opsonic extinction being from 1:30 to 1:1,500, 1:150 being the point at which phagocytosis ceased for the majority of the strains. None of the remolytic streptococci isolated from the throat late in scarlet fever, except in instances noted, and none from sources other than scarlet fever, were opsonized by the immune sheep serum in dilutions higher than by normal serum; and none of these cultures were agglutinated by either normal or immune serum. Hemolytic streptococci obtained from the throats of nine patients during convalescence from scarlet fever, one during the second, the others during the third and fourth weeks, were not agglutinated by the immune serum and not opsonized in higher dilutions than with normal serum. The results so far indicate that the hemolytic streptococci isolated from the throat at the onset of the attack of scarlet fever are immunologically different from most of those obtained during convalescence, and that some of the hemolytic streptococci in complicating lesions may differ immunologically from the streptococci in the acute stage of scarlet fever. These results also suggest that immune sheep serum may be helpful in diagnosing suspected cases of scarlet fever and in determining the length of quarantine for patients with purulent discharges. Absorption experiments indicate clearly that the hemolytic streptococci that prevail in the throat in the acute stages of scarlet fever form a group immunologically closely related and apparently peculiar for scarlet fever. Possibly the serum produced with this scarlatinai streptococcus group may prove of use in the diagnosis of scarlet fever, and eventually, perhaps, in determining the length of infectivity.

R

Tuberculous Enterocolitis

The pathology of tuberculosis of the intestine is divided by R. D. Carman, Rochester, Minn. (Journal A. M. A., May 15, 1920), into three types: (1) nodular; (2) ulcerative, and (3) fibrous. He points out that a lesion

roentgenologically demonstrated in the ileocecal coil, with irregularity of bowel contour and without the physiologic barium shadow in the cecocolon, although it may represent any ulcerative process, is probably tuberculous if pulmonary tuberculosis is present. The tuberculous lesions may be nodular, ulcerative or fibrous. They are usually associated to a greater or less extent, dependent on the stage of the disease. The nodular type is recognized by means of the roentgen ray only if it encroaches on the lumen of the bowel, and the ulcerative and fibrous types by irregularity of contour, and in the terminal stages by obstruction. The presence of spasm must not be overlooked, since it often causes irregularity of contour and is diagnostic even when the lesion itself is not demonstrable. The opaque enema generally is preferable to the ingested meal in demonstrating the filling defect and spastic phenomena which are roentgenologic signs of tuberculous colitis. A gap in the physiologic barium shadow of the cococolon in the more advanced cases is demonstrated by the ingested meal, but unquestionably the disease will be demonstrated earlier by the enema.

R

Diagnosis and Management of Intrathoracic Goiters

Four completely intrathoracic adenomas of the thyroid, one large, completely intrathoracic thyroid cyst, and sixty substernal or incompletely intrathoracic thyroid growths, varying in the depth of their locations from almost completely intrathoracic goiters to slightly substernal adenomas or colloid goiters are the basis of Frank H. Lahey's paper, Boston (Journal A. M. A., July 17, 1920). The most essential single feature in the operative procedure he says is that the intrathoracic mass be delivered as a whole. Piecemeal delivery is to be avoided because of the almost uncontrollable deep bleeding which occurs if the tumor is broken up while still located within the chest. These intrathoracic growths are very vascular within their capsule; but if delivered intact they readily permit of vascular control by ligation of their more or less pedunculated blood supply. Piecemeal removal is also to be avoided because of the possibility of leaving adenomatous masses behind, from which recurrent growths may develop. If all other measures fail, and delivery is impossible, because the diameter of the tumor is greater than that of the upper thoracic aperture, recourse may then be had to splitting the sternum—a measure which was necessary in one of Lahey's cases—by which wedges may be inserted, and the thoracic

aperture so widened that delivery is possible.

R

Noninterference in Treatment of Puerperal and Postabortal Infections

Rest in bed, raising the head of the bed if the infection is of recent origin and appears rather virulent are steps taken at once by E. L. King, New Orleans (Journal A. M. A., July 17, 1920). Hyperpyrexia is controlled by hydrotherapy. Fluids (chiefly water) are supplied plentifully—by mouth, if tolerated; by rectum, when indicated, and at times by hypodermoclysis or intravenous saline infusion. The patients are nourished freely on soft or semisolid food, the only contraindications being vomiting and peritonitis. The bowels are kept open by enemas, saline laxatives being used only occasionally. In cases of pelvic cellulitis or pelvic peritonitis, apply a light ice bag to the hypogastrium; when the acute local symptoms have subsided in these cases, copious douches of plain hot water are used twice daily. Drugs are secondary to the general supportive measures. The patient is given a general supportive treatment, and the pelvic is left severely alone after the preliminary examination. The best results are obtained in these cases by letting the uterus alone until the temperature is normal and the uterine culture becomes negative. The only exceptions are (1) patients in whom placental tissue appears through the open cervix, or (2) patients suffering from profuse bleeding due to the retained fragments.

R

Mistakes in Thyroidectomies

A series of 100 thyroidectomies for relief of toxic symptoms is analyzed by J. Tate Mason, Seattle, (Journal A. M. A., July 17, 1920). The series consists of fifty-eight patients operated on for exophthalmic goiter, with five deaths. Substernal goiter was found in six patients, all showing thyrotoxic and pressure symptoms. All these cases were adenomatous, which, with other studies, leads Mason to believe that all substernal goiters are adenomatous and toxic. Secondary operations were necessary on six patients because of recurring symptoms associated with considerable enlargement of that portion of the thyroid left at the previous operation. Immediate improvement was noted following the first operation for a period averaging two years; then within a few months the symptoms became nearly as marked as before the first operation. Mason gives his views as to when and how

to operate. He has done actual cauterization of the exophthalmic gland during the last years in a few cases, and apparently this is theoretically perfect surgical treatment. It is simple and painless and can be performed without the patient's being conscious of what is going on. Reaction has been negligible. The results have been excellent.

I

Migraine Therapy

Bernard Fantus, Chicago (Journal A. M. A., Aug. 7, 1920), has used with excellent results in the treatment of migraine a mixture recommended by T. Lauder Brunton consisting of sodium salicylate, 1 gram, and potassium bromid, 2 grams. It is essential that the dose be given at the earliest possible moment when the headache is approaching; best indeed, that it be given before it sets in by taking advantage of the signs by means of which these patients know that they will have a headache. Fantus likes to impart effervescence to the medicine in the belief that it favors its efficiency and retention. If the whole dose is vomited up, the patient might be able to retain a quarter of it taken in a wine-glassful of seltzer water every fifteen minutes. If a single dose does not suffice to jugulate the headache, a further dose may be taken hourly, until phenomena of salicylism, such as ringing in the ears, compel discontinuance. Fantus prescribes the remedy in this form:

Gm. or Cc.

Potassium bromid.	12 0
Sodium salicylate.	6 0
Sodium bicarbonate.	12 0

Mix and divide into six blue powder papers.

Tartaric acid. 10|8

Divide into six white powder papers.

Label: Mix contents of a white and a blue paper in half a glass of water. Repeat dose hourly if required.

R

Technic of Nerve Suture

The position of the patient, the management of the operative field, special incisions, operations available, suture materials, technic of end-to-end suture, and technic of the graft are topics considered by Byron Stookey, New York (Journal A. M. A., May 15, 1920). He says that on the utmost consideration of minute points of technic, more exacting perhaps than in almost any other field of surgery, may depend, in large measure, the ultimate results of peripheral nerve surgery.

Tidal Irrigations of Wounds

The tidal irrigation of wounds had its origin in France. The improved apparatus and the technic of its use were developed largely by W. H. Taylor and N. B. Taylor, Guelph, Ont. (Journal A. M. A., June 19, 1920), during the latter part of the war, in Canadian hospitals in England. Reports of cases and descriptions of the method and the appliance were published on various occasions under the caption of "liquid-tight closure." The practicability of tidal irrigation is dependent on liquid-tight closure, which renders possible the copious flushing of wounds without wetting the dressings. The wound is covered by a flexible rubber cap whose brim makes contact circumferentially with the neighboring skin. The ring contact with the skin is water-tight; and the fact of its water-tightness is the sine qua non of this system of treatment. Two tubes leave the top of the cap, the inflow connected with a elevated reservoir and the outflow leading to a waste vessel set below the level of the wound. Each tube communicates with the interior of the cap which, in turn, is continuous with the cavity of the wound. From the reservoir to the waste pail, then, we have a single "pipe line", the dilated section of which is comprised by the wound and its covering cap. This cap-covered wound is capable of containing fluid, even under considerable pressure. Flooding of the wound is effected by closing the outflow and opening the inflow tube. Suction in the wound is brought about by siphonage; this is established by closing the inflow and opening the outflow. Thus positive and negative pressure may be alternated by the manipulation of pinch cocks on these tubes. The rubber cap is seen to distend during positive pressure and to shrink during negative pressure. There is no moisture of the dressings to suggest that the wound beneath is being flooded. Continuous irrigation is never used. The wound is filled and left filled for a time. It is then emptied and allowed to remain under the influence of negative pressure until refilled from the reservoir. No drainage tubes are used, for the simple reason that the wound itself constitutes, actually, the expanded portion of the conduit leading from the irrigator to the waste vessel, and that continuity of fluid pressure extends into every side track of this conduit, that is to say, into all the ramifications of the wound. For full details of this method, the original article should be consulted. The authors and others have treated more than 400 cases by this method, and the results obtained have exceeded even the expectations which the

logic of the procedure seemed to justify. A good proportion of the cases treated were recently infected wounds.

B

Radium Treatment of Chronic Leukorrhea

In a series of forty-six cases reported by Arthur H. Curtis, Chicago (Journal A. M. A., June 19, 1920), the patients were subjected to a thorough pelvic examination, the reaction of the discharge tested, smears obtained from the cervix and vagina, and a set of cultures made. Gross pathologic lesions were corrected surgically. The usual hygienic measures were instituted. The most usual and most difficult forces to eradicate lies in the endocervix. Unless the discharge is essentially of vovlovaginal origin, radium is advocated in all severe cases of persistent chronic leukorrhea. After thorough dilation, the cervix and fundus may be curtted for diagnostic purposes. Fifty mg. of radium, preferably two 25 mg. tubes in tandem, are introduced high into the cervix, held by a suture passed through the external os, and left for several hours. One or more subsequent radium treatments of shorter duration may be required. It is best to plan on an interval of from ten to twelve weeks between applications. Each radium tube employed in the treatment of this series of cases was screened by a double gold capsule with a total thickness of 2 mm. The capsule in turn was incased in dental rubber. Examination of cervical tissue after successful radium treatments reveals atrophy of the glands, relative increases in fibrous tissue, and disappearance of microscopic evidence of infection. Skene's ducts harbor the next most important focus. At the time of radium application, or under procain anesthesia, the blunt end of a needle, held in forceps, is threaded into the duct lumen, and its end is forced through the base of the duct to sat the needle head protrudes into the vagina. The duct is split with a knife and the tract fulgurated. Bartholin duct infection may be eradicated by similar treatment. Infected Bartholin glands rarely require excision. The urethra is occasionally treated by dilation, aided by instillations of eak silver nitrate solution. Tenty-five patients were cured; 7 were improved; 4 were not improved; in 10 cases no report can be made as yet.

B

Results of Exposure of Animal Ovaries to Radium

Experiments on rabbits have convinced John M. Maury, Memphis, Tenn. (Journal A. M. A., June 19, 1920), that a 600 mg. hour dosage or the follies of the ovaries.

Bile Pigments in Pernicious Anemia

The records of seventy-eight patients ill with pernicious anemia are tabulated by J. P. Schneider, Minneapolis (Journal A. H. A., June 26, 1920), for a period of three years. The average number of months the patient had been ill when first seen was fifteen. The average total length of illness of those who died was 2.6 years, the shortest being six months and the longest six and one-half years. The average red blood cell count was 2,000,000 per cubic millimeter. The average hemoglobin was 40 per cent. The average hemoglobin index was 1 and the average white blood cell count 4,400. The degree of cord involvement was: twenty, severe; twenty, moderate; twenty, slight; eighteen, none. The average total bile pigments (urobilin and urobiliogen) was 3,330 units, the highest total being 6,800, and the lowest 800. Three patients out of the total gave normal pigment values, two of which were repeated with the same result. One is dead, two are living. Two are certainly cases of pernicious anemia; in the other three are still a few elements of doubt. An indication of the fatal character of this disease is the fact that the seventy-five patients traced, fifty-two are dead. Of the 1915-1916 series only one, and that a splenectomized patient, is living. Of the 1917-1918 series fourteen are dead and twelve living. Of the 1919-1920 series, eleven are dead and ten living.

R Future and Pediatric

The most important problems which present themselves to the specialist in diseases of children are discussed by Fritz B. Talbot, Boston (Journal A. M. A., June 26, 1920), from the point of view of (1) the medical schools, (2) the practitioner and (3) the public. Talbot urges that after graduation, every practitioner should apply the principles of the prevention of disease. In those communities in which he is a pioneer, he should organize child welfare stations so that the poor as well as the rich will profit by this knowledge. The public is already prepared for such work and will welcome it, and perhaps even demand it. The practice of these principles will decrease his income. The practitioner need not fear that the application of the contrary, although he will treat fewer sick children, he will have an increasing stream of children coming to his doors to be kept well. He will have the satisfaction of knowing that he has played a small part in diminishing suffering, in increasing efficiency, and in preparing the

manhood and womanhood of the country for a future emergency.

R

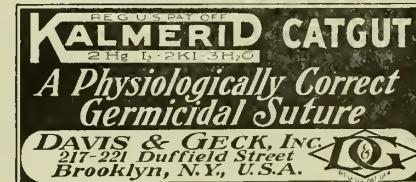
Postdiphtheritic Paralysis

A case of general postdiphtheritic paralysis in a 3-year-old boy and another in one aged 7, are reported by S. W. Boorstein, New York (Journal A. M. A., Feb. 21, 1920). He describes the symptoms and varieties of this disorder. While severe, the disease may be curable. In the first case, he credits orthopedic treatment as probably of more value in hastening the recovery than the antitoxin administered. In the second case, which has lasted altogether two months, antitoxin was early administered, but still paralysis developed. In this case what skepticism he had as to the value of the orthopedic treatment in the previous case was dispelled by the greater and more notable success. The article is illustrated.

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THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, SEPTEMBER, 1920.

No. 9

Chorea

CHOREA OF CHILDHOOD, SYDENHAM'S
CHOREA, ST. VITUS'S DANCE

LUCENA C. AXLELL, M. D., NEWTON, KANSAS

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

Chorea, as a distinct disease, was described by Sydenham, in 1686, who separated it from a mass of other nerve disorders, such as epilepsy, hysteria, mania, etc.

In 1810 a French writer, Bontielle, wrote of chorea that "everything connected with this disease is extraordinary; its name is ridiculous, its symptoms singular, its course unusual, its cause unknown, and its cause unknown, and its treatment problematic."

While some of the problems associated with chorea are somewhat clearer now than at the period when the above statement was made, the situation regarding it remains in the main unchanged. Facts fairly well established, however, seem to prove that the disease is either directly associated with infection or follows it.

Chorea usually comes in children, and is a disease of the central nervous system, characterized by irregular, involuntary muscular contractions, which may continue during rest but usually cease in sleep, and are increased by excitement and emotion.

CONDITIONS WHICH INFLUENCE THE DISEASE

It is found more frequently in the female than in the male, in the proportion of three to one. It is said not to come in the sucking child but a little more than 3% occurs from the first to third years, 75% from six to fifteen years, the largest number from nine to eleven years, and 13.5% between sixteen to

twenty years. It is said that after the 25th to 30th year, chorea, especially in men, usually means organic disease or Huntington's chorea or other central lesions.

Moisture and exposure seem to exert an influence upon those predisposed to the disease, and have about the same relation to Chorea that they do to arthritis. Most authors say that their statistics show one-half more cases coming in the four winter months but I found one author who had most cases coming in the spring. Bad hygienic conditions, poor houses, overcrowding, etc., have a bad effect upon all forms of infectious chorea.

There seems to be a great variety of opinion among authorities as to the part heredity plays in acute chorea. Wollenberg, in 539 cases, found two per cent in whom there seemed to be a direct hereditary influence. It would seem reasonable to suppose, however, that the child of neurotic parentage might have less resistance to the disease than another. Negroes and Indians seem to enjoy an immunity to the disease.

Psychic disturbances, such as fright, worry over tests and examinations in school, over-study, unusual long-continued strain in one line of work, and masturbation, may all be exciting causes of this disease. In almost all these cases investigation will reveal a source of infection, which may be latent or active. The imitation choreas are hysterical and yield to removal from the infective cases and rest for a time.

DISEASES ASSOCIATED

Nasal infection, as well as tonsilar or middle ear or tooth infection, may lead to chorea, or may be the underlying factor

during long periods of the disease. In most cases where chorea is associated with diseased tonsils, joint symptoms and endocarditis are present. Acute infectious arthritis is a distinct cause of chorea. The specific cause of acute arthritis, whether it be the "streptococcus rheumaticus" of Poynton, Payne and Rosenow, or the ordinary streptococcus, is, where these diseases are associated at least the underlying cause of the chorea, which may persist after the arthritis is controlled. Statistics report all the way from twenty-five to eighty per cent of cases of chorea associated with arthritis. Endocarditis complicates chorea in some cases,—in just how many it seems difficult to give a clear estimate owing to the varying reports of different authorities. Chorea may be associated with most of the infections of childhood, especially scarlet fever. It is a peculiar fact that if the acute infections develop, it seems to check or altogether dissipate the movements. When chorea is a sequel of these infectious diseases, or of typhoid fever, the prognosis is not so favorable as in ordinary cases.

It frequently happens that the course of chorea may be influenced by correction of ocular errors, especially are the minor forms as facial spasm, habit spasm, benefited by relief of an eye strain.

MENTAL SYMPTOMS

Some psychic disturbances are almost constantly present in chorea. The child is almost always irritable, sometimes having violent outbursts of temper. Memory is sometimes faulty and concentration difficult. The severe cases may have hallucinations, delusions, and even mania. Dementia does not follow or develop in simple chorea. Prognosis of the psychic disturbances is as a rule favorable, although their duration is uncertain. Cases where the motor disturbances are most active and severe often terminate suddenly, while those apparently much less severe and acute may drag out a long course.

It is said that the two most important questions to ask concerning the child with latent or chronic chorea, are—whether it sleeps and eats well. If these two functions

are normal, a favorable termination may be looked for.

There is often a muscular weakness following chorea which simulates a paralysis, sometimes requiring careful differentiation, but the prognosis is always favorable. The great muscular activity and loss of sleep and rest may result in much loss of flesh, which need not give undue concern since with convalescence there is a prompt return to normal weight. Involvement of the sphincters is present in only the most malignant forms of chorea in which the prognosis is very grave. The urine offers no particular data. Blood examination offers no particular prognostic data. The experience of several investigators seems to prove that increased eosinophilia is present in most cases of true chorea and its presence in abnormally large amounts, after a child is convalescent, usually means incomplete cure or relapse.

Careful physical examination usually reveals some heart anomalies which may be functional or organic. The irritable, erratic and tumultuous heart with overactive systolic force is characteristic of chorea. Systolic murmurs are common as are changes in the size of the heart. It is sometimes hard to decide between an endocarditis and functional derangement. No doubt endocarditis and sometimes pericarditis are responsible for the physical signs in a large number of cases, and have a serious influence upon prognosis. Endocarditis is practically always present in fatal cases of chorea, and Osler says there is no disease in which endocarditis is so constantly found, post-mortem, as chorea. Osler states also that the primary heart trouble in chorea is, in most cases, at least, endocarditis and in most of these cases a slight trouble with few physical signs will continue through life. Fifty-one and three-sevenths per cent of 140 cases examined in from two to sixteen years after chorea showed some damage to the heart. The majority of cases, where there are heart symptoms, however loud the murmurs during the progress of the disease, will clear up with the disappearance of subjective symptoms. The complication of pericarditis influences prognosis unfavorably.

Typical mild chorea minor, without serious complications, with the "choreic heart," and usual motor and psychic symptoms, runs a favorable course, when carefully watched and treated, in from four to eight weeks. The severe cases may persist with or without remissions from four to eight months. The mortality in chorea is almost three per cent, and usually death is due to pericarditis or endocarditis. Prognosis at puberty or shortly before is less favorable than between the sixth to tenth year.

Chorea in the aged is a grave disease and usually not primary. A rapid and fatal termination may occasionally follow or be associated with scarlet fever, diphtheria or typhoid. Chorea gravidarum, or chorea of pregnancy, is most likely due to toxemia. It comes most often in the first half of pregnancy and usually in subjects who have had the disease in childhood. It is as a rule severe, not easily controlled, and is likely to be associated with phycic disturbance. Prognosis is usually grave for both mother and child. Prognosis for the mother is materially improved with termination of pregnancy by artificial means.

Relapse in this disease is frequent, coming in about fifty per cent of all cases. It is likely that relapse will be less frequent in the future than in the past since the infectious nature of the disease is recognized and search for the infecting focus is usually made. Females have more frequent relapses than males. Males rarely have more than three relapses while females may have from twelve to fifteen. Duration and severity of succeeding relapses are progressively reduced. The interval between remissions is variable, most reports say from ten to thirteen months. The heart symptoms may remain unchanged through succeeding attacks, or there may be no positive heart involvement in the first attack and subsequent attacks show positive choreic heart with endocarditis.

Recurring chorea, with its often organic or functional heart complication, interferes seriously with a child's education and development. It is said that choreic children, especially girls, are often usually bright and this

handicap of disease is a very serious problem.

HUNTINGTON'S DISEASE,—HUNTINGTON'S CHOREA, CHOREA OF THE AGED, FAMILY CHOREA, CHRONIC PROGRESSIVE CHOREA, ACUTE HEREDITARY CHOREA.

Huntington of Long Island, in 1872, called attention to a form of chorea which his father and grandfather before him had observed in certain families of southeastern New York and Long Island. The disease is hereditary, being easily traced through several generations. Many members of these particular families are attacked, sometimes as many as half the members of the entire family suffer from the disease. Males are more often attacked than females, and when the chain is broken in one generation the disease does not reappear. This chronic form of chorea presents pathological changes which should separate it from true or Sydenham's chorea. The most marked changes are found in the basal ganglia. These changes include considerable cell destruction. The Wassermann reaction, where reported in these cases, has been negative. It is not a disease of early life, coming after the 30th year, usually between 30 and 45. The prognosis is absolutely bad, as shown by its three marked characteristics,—its hereditary nature, a tendency to insanity and suicide, and its manifesting itself as a grave disease coming only in adult life. No recoveries are recorded, neither are symptoms relieved, but gradually increase until before death every voluntary muscle of the body is affected. If members of a "Shaker" family live beyond the fortieth year without symptoms of the disease, the chances are they will escape. Duration of the disease may be twenty or more years. Some have reached the age of seventy. Death may follow extreme marasmus, with dementia, acute intercurrent infection, or suicide.

Electric Chorea is a name applied to a number of affections of unknown origin and there is some doubt as to whether they should be called chorea at all. It is likely that most of these cases are a form of hysteria. In most of these cases the movements occur with great suddenness, the muscular twitchings following each other with almost light-

ning rapidity. The muscles of the shoulders and neck are mostly affected. In another form of so-called electric chorea sudden spasms make their appearance in children of from seven to fourteen years, attacking the muscles of the back of the neck, shoulders and arms and shake the entire body. Sometimes the muscles of one extremity only are affected. Attempts at control usually aggravate the trouble. The prognosis is uniformly favorable, the symptoms yielding to simple physiologic methods and tonics.

Dubini, an Italian, has discovered an affection occurring in northern Italy, which begins with pain in the back and neck, soon lightning like contractions make their appearance in one-half the body, namely the face, arm and leg,—subsequently the other side of the body is involved. Sometimes epileptiform attacks, and paralysis appear. Pain and fever come on and later widely diffused palsies and wasting of muscles and changes in the electric reactions follow. Recovery is rare. Death usually follows heart failure and coma. It is probably an infectious disease.

TREATMENT OF SYDENHAM'S CHOREA

Rest is the first principle of treatment of Sydenham's chorea. The child should not be allowed to go to school and if the case is at all severe, rest in bed should be instituted. If the case is mild and the child allowed to be up and about, the hours in bed should be at least increased. Diet should be liberal and nutritious, with milk given freely both with and between meals. Arsenic is the most reliable medical agent,—very small doses, one drop three times daily at first, this may be increased by one drop daily until three or possibly four drops are given three times a day. It should then be discontinued for a few days or the dose diminished drop by drop until the original dosage is reached, and then another course begun. Watch should be kept for puffiness below the eyes or gastric or intestinal disturbances when the medicine should be discontinued. Arsenic is not necessary to the successful treatment of the disease and if there is any doubt of intelligent administration of the drug or dan-

ger that the physician will not be able to observe the child, it would better not be used at all, since some cases of chronic poisoning have resulted from the prolonged use of the drug. Iron is a safer tonic and may be used in its place. Occasionally antipyrin and the salicylates are useful. In very severe cases, when the movements are violent and continuous, small doses of trional or veronal may be given. The bromides also may be useful.

Children suffering from this disease should receive close personal attention. Careful examination of the throat, nose, ears, eyes, gastro-intestinal tract, teeth or any other possible avenues of infection should be made and carefully studied.

I have quoted in this paper from Osler, Holt, Elsner, and DaCosta.

R

Tubercular Peritonitis With Special Reference to Cases Involving the Pancreas

BY R. C. DUGAN, M. D., OTTAWA

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

Tubercular peritonitis is a subject not frequent discussion before medical societies and the writer has wondered if the reason thereof could be the impression that we know all there is to know about it. When we attain this attitude of mind on any subject it would seem advisable to investigate.

It is not my expectation to offer anything really new but rather to call attention to a somewhat neglected subject, particularly, "The Diagnosis and Involvement of the Pancreas."

The diagnosis of tubercular peritonitis is to be arrived at largely by exclusion, as it may simulate disease of almost any organ within the abdomen or it may be so vague as to attract attention by its very obscurity. Probably the most common error is to mistake it for malignant disease of some abdominal organ. Twice it has been the writers good fortune to find upon an exploratory incision tuberculosis where a diagnosis of malignancy,—once of the kidney and once of the stomach, had been made and a hopeless prognosis rendered. Both cases made a perfect symptomatic recovery, thus returning to

useful and happy lives; (two women who had been supposed in a hopeless condition). Another case that exemplifies the danger of excluding tuberculosis on account of age was a woman seventy-two years of age, with abdomen greatly distended with fluid, tender over liver area and apparent lessening of liver dullness, by reason of the patients age, general cachectic appearance and liver symptoms. I made a diagnosis of probable malignant disease or cirrhosis of the liver but advised exploratory operation in the hope of stitching the omentum to parietes forming a collateral circulation.

Great was our surprise to find the most extensive case of general miliary tuberculosis that I have ever seen. The parietal peritoneum being fully one and one-half inches thick with tuberculosis. The fluid was evacuated and she made a perfect clinical recovery, living ten years and dying of a cerebral hemorrhage. Several times the writer has seen mistaken diagnosis due to the matting of the omentum which has become adherent to some organ giving the appearance of tumor of same, one case as above described, the left kidney, another of malignancy of cecum, another massed in pelvis simulated puts tubes and once the rare condition of tubercular peritonitis in conjunction with Neisserian infection of the tubes.

Tubercular peritonitis is always a secondary condition and the original foci should be sought for and if within the abdominal cavity removed when possible. Chas. Mayo is of the opinion that the tubes are the portals of entry in many cases in the female and advises the removal in all cases where no contra indication exists. The extra-abdominal sources of infection may be any organ of the body probably the most frequent being the lungs, mediastinal glands and intestinal ulcers.

Mayo Robson believes that the germs are transmitted more frequently by the blood current than by the lymphatics and it is probably through the blood current that the spleen and pancreas become involved. Primary tuberculosis of the pancreas is very rare. Mayo Robson reports only one case

and that in quotation from W. J. Mayo of a case seen by him in Senn's Clinic. Keen's System of Surgery gives a paragraph of eight lines to the subject of tuberculosis of the pancreas. But as it is deeply situated and the attention of the operator usually centers on some other organ I have wondered if it were not occasionally overlooked and might not be the cause of failure in the treatment of some of these cases as an extensive involvement of the pancreas must necessarily interfere greatly with digestion and therefore with the nutrition and recovery of the patient.

In this connection the writer begs your sufferance to report in some detail a case, unique in the extent of involvement of the pancreas and that it appeared to be the original foci within the abdomen. Miss X; sales lady; single; 48 years of age; family history, vague; personal history, always been a hard worker with fair health, some digestive symptoms for many years. Had fifth nerve injected with alcohol for neuralgia three years before, otherwise negative until summer of 1918 began to lose strength and noticed enlargement of abdomen.

First called family physician in October, 1918. First seen by the writer December 10, 1918. Fairly nourished, greatly distended abdomen, evidently fluid, although one physician thought he could detect a growth on or in the uterus. Great deal of distress following the taking of food, otherwise symptoms vague. Operated, January 6th, 1919. About two gallons of raw colored fluid evacuated and a moderate amount of miliary tubercle on parietal and visceral peritoneum. The pancreas, however, was very movable much more so than normal and apparently a solid mass of miliary tubercle, no normal pancreatic tissue could be discerned macroscopically although of course some must have been present. The tubes and appendix were removed although they did not appear to be the original foci of infection. The abdominal cavity was mopped as dry as possible and closed. An unfavorable prognosis was given to the family which has been verified as the fluid quickly reaccumulated and was removed

once through a small incision under local anesthesia and several time with trocar.

The case has passed from my hands for change of climate but I am informed that there is little or no improvement. This case is, I think, unique in the amount of tubercular involvement of the pancreas and its having been apparently, the original focus of infection within the abdomen.

In conclusion the writer wishes to make a plea for more frequent exploratory incisions in obscure abdominal cases and that the operator examine the pancreas in all cases of abdominal tuberculosis that we may learn if it is more common than heretofore believed.

R

Hypodermic Therapy of Chronic Constipation

JAMES W. OUSLEY, M. D., KANSAS CITY, MISSOURI

The feces in this condition are retained in the bowel for an abnormally long period; this usually results from deficient food, deficiency on the part of the intestinal muscles, or deficient secretion of the bowel.

Most cases of constipation result from a deficient peristaltic, and expulsive power of the bowel. With many people, especially women, constipation is habitual, and is largely due to want of regularity in attending to the calls of nature. A law governing intestinal evacuations in man requires four hours for the bowel contents to pass through the small intestine, and usually twelve to twenty-four hours to travel from caecum to anus.

Ewald holds that there is a form of habitual constipation in which there is either diminished irritability of the intestinal nerves, or defective development in the muscular coat of the intestine.

The causes of constipation may be general, or local. This condition is always looked upon as a symptom, and its diagnosis is easy. Local causes, as atony of the bowel and intestinal neurosis, among the general causes, include sedentary habits, errors of diet, bodily weakness, habitual use of purgatives, and unsanitary closets.

The general symptoms of constipation are mental depression, foul breath, furred tongue,

and headache. An accurate diagnosis is made after giving the patient a barium meal, and making several skiagraphic examinations; by means of such an examination, the exact location of the delay may be determined.

Holzknecht in a roentgenological study of spastic constipation showed in the great majority of the cases, a marked degree of hypertonicity in the distal portion of the colon; contrasted with this, the proximal portion of the large bowel exhibits normal tonicity with hypermotility.

The line of separation between these two portions is variable in location, but is always found somewhere between the hepatic flexure and the end of the descending colon.

Treatment: The most important element is to stimulate the glands, mucous membrane, muscles and nerves of the bowel to bring about a desire for evaeuation; and here I wish to call your attention to hypodermic injections of purgative drugs.

Braillon (*These de Paris*, 1913) has experimented with rabbits and dogs, with the view, more particularly, of testing the toxicity of those purgatives which can be given subcutaneously. He employed sodium citrate and sulphate, infusions of cascara, senna, rhubarb, aloes, and lastly phenolphthalein. Injections of sodium sulphate are painful, causing an induration at the site of the injection which may result in sloughing; this salt produced frequent and abundant stools, but never liquid ones. The citrate is extremely painful when injected subcutaneously, and should be rejected in practice regardless of its excellent results as a purge. The infusions of senna, rhubarb and cascara given subcutaneously produced in the rabbit, stools softer than usual, while at the same time the weight of the feces was increased.

A 4% solution of aloes was toxic for the rabbit, but dogs supported it well, and the purgative results were distinct. In rabbits phenolphthalein did not produce liquid stools, but an increased weight, and a safter consistency of the dejections. Phenolphthalein exaggerated peristalsis and increased the intestinal secretion, but the contractions were

not so energetic as those obtained with aloes, senna and especially sodium sulphate.

Subcutaneous injections of magnesium sulphate has given us good clinical results in chronic constipation. I am using a 25% solution of magnesium sulphate (subcutaneously) 0.6 gm. of the drug in 2 gm. of distilled water; injected once a day, continuing from six to ten days, as a rule in obstinate cases; in mild cases one or two injections may suffice; as a rule by the sixth to tenth day even the worst cases are relieved. In exceptional cases, inject twice the dose morning and evening.

Spontaneous defecation occurs after the fourth injection, and stools become soft at the seventh in most cases; when the stools become liquid, almost diarrheal, the treatment is suspended. Some cases may require more injections than others. No saline or other purges are allowed during the course of treatment. If the series is suspended, it should be repeated from the first. Subcutaneous injections of purgatives is interesting and important, and further clinical observation should bear out this method of treatment.

R

The Bacterin Treatment of Infections

BY F. J. CHAMPNEY, M. D., CLEVELAND, O.

From a fairly extensive experience and observation in bacterin therapy the writer has come to the conclusion that too often failure results, not so much from the bacterin used as to the neglect of the physician to carry out the other necessary measures essential to success. More attention should be given the refinements of technique and the law of immunity. It seems, that in many cases, a physician begins the use of bacterins with the idea that all that is necessary is to get the bacterin and use it and success must follow as does day the night. I believe that oftentimes bacterins are given with less preparation of knowledge of their use than is given to the subject of the dosage of quinine or mercury.

Given even in this haphazard way, there is no doubt that often remarkable recoveries ensue, but such practice is unfair to the patient, to the physician and to the therapy.

As no criticism is justified that is purely

negative I would submit that it would be of advantage to all concerned were the physician, taking up the use of the bacterin, to give more thought and time to the subject of the laws of immunity as we now know them and to a proper technique. True, the last word has not been said, but the therapy has been long enough established to demonstrate that, given in the dosage found advisable and at proper intervals, no harm has been reported from their use and much good has been accomplished. Some of the measures which ought to at least be borne in mind in the practical use of bacterins cannot, I believe, be too often reiterated. In chronic cases, as a rule, it is unwise to give large doses at the start or too frequent intervals. For some reason, probably that the immunizing forces are fatigued in these conditions, the negative phase is easily induced and the reaction may be sharp—an event unpleasant to the patient and not helpful to his recovery. The dose should be small and not repeated until the positive phase is on as evidenced by the objective findings of the physician and the subjective sensations of the patient.

In acute infections the opsonic response, as a rule, is prompt. The organism tolerates relatively larger doses and the negative phase is quickly passed, allowing an early repetition of the same of larger dose.

It should be borne in mind that in order for the blood, enriched with antibodies, to conquer infection, it must have access to the offending bacteria. In order to obtain this result it is necessary to overcome stasis and, if possible, produce a hyperaemia in the infected area. In carbuncle, acne and other skin infections, hot compresses or Biers' hyperaemia is indicated. In pneumonia, the indications are to use counter irritation on the chest and to lessen coagulability of the blood by the administration of citric acid. Pus cavities should be evacuated, etc.

As phagocytosis is one of the important factors in the production of immunity it is often of advantage to administer some form of nuclein in conjunction with the bacterin treatment. It is established fact that nuclein increases the number of leucocytes, and, un-

der the opsonizing influence of the bacterins these leucocytes become increasingly active as phagocytes.

This factor, of an increased leucocytosis, it appears, has not received enough consideration in conjunction with bacterin therapy. In this connection it might be well to also observe, that a mixed bacterin induces a greater leucocytosis than one of a single organism. This offers a rational explanation of the fact, clinically observed, that in the early stages of acute infections the best results are obtained with mixed vaccines. It is, perhaps, unnecessary to reiterate that bacterins should be used early in infections and the earlier, the better.

From the over-enthusiastic statements of a detail man or a brother physician, perhaps, the new beginner sometimes seems to think if a vaccine is used nothing else much needs to be looked after.

It seems a just deduction that if oftentimes, with established and orthodox treatment, a patient's index can be raised sufficiently high to overcome his infection, certainly he should have the benefit of that help when bacterins are used. In other words, elimination should be attended to, supporting measures instituted when called for and stimulation where indicated. These observations are trite and are only made with the hope that they may be the means of calling attention to some of the causes of poor success in vaccine therapy. Of one thing there can be no doubt and that is that the more experience a physician gains in bacterial therapy, as in any other therapy, the higher is his percentage of cures and the greater his confidence in their value as a life-saving agent.

R

Measles: Brain Complications

Two cases of measles seen by A. L. Skoog, Kansas City, Mo. (Journal A. M. A., June 19, 1920), presented brain complications, one a cerebellar and the other a meningeal involvement. The first patient made a complete recovery in a short period, indicating that few or no cerebellar neuronal elements were destroyed. The second patient was not so fortunate. It is reasonably certain that imbecility and possibly epilepsy will always be present.

BELL MEMORIAL HOSPITAL CLINICS

Out-Patient Clinic of Dr. Logan Clendening.

THE INTERPRETATION OF X-RAY PICTURES OF THE STOMACH

We have here the X-Ray negative of the stomach of the patient whom we saw last week, and in whom we suspected a gastric ulcer. It is worth while to consider this plate rather carefully because you will be called upon often to interpret such plates and you must know the fundamental principles upon which such interpretation rests.

In the examination of the gastro-intestinal tract by modern methods, I think we may say without reservation that the most important single element in most cases is the X-Ray examination of the barium-filled stomach and intestines. So that it behooves you to have some pretty definite ideas about these things. In this, as in every method of examination, we should have a routine list of points to run over and settle in a regular order. What are those points? What do you wish to know about a stomach that the X-Ray can tell you? Let us make a brief list for our mental memorandum book.

We can put them under three general headings: anatomical, physiological, and pathological facts.

Anatomical:

1. Shape.
2. Position.

Physiological:

3. Tone.
4. Movements.
5. Emptying rate.

Pathological:

6. Outline.

1. Shape. I should say that this stomach was well within the limits of the normal, as regards shape. There are several forms of stomach that have been described by the continental workers, Haudek and Holzknecht who were pioneers in this field. There is the narrow stomach with the pylorus well to the right, known as the cow's horn stomach. Then there is the larger and broader stomach, drooping more and keeping well to the left of the midline of the body.

This stomach if we must choose any term for it would be called a cow's horn stomach.

2. Position. We wish to know, not only the shape but also where in the abdomen the stomach is. In heavy people it is usually high, held up by the thick mesentery, and the masses of omental and abdominal fat. In thin people with narrow costal angles, and long muscles it is usually low. The extreme of this is the stomach of enteroptosis which often reaches nearly to the pyloris, has a broad base and pulls the walls of the stomach above nearly together in supporting it. This position gives rise to several important defects which cause much of the discomfort of the gastrophtotic invalid; for the pylorus remains fixed and high so that in order to empty itself the stomach has to force the food upgrade. It has aptly been termed a water-trap stomach. Besides this on account perhaps of the pull on the gastric walls the peristaltic action of the stomach is interfered with, and the emptying is further made difficult.

The only defect that I can see in the stomach we are studying is that it is pulled somewhat to the right suggesting possibly gall bladder adhesions.

3. Tone. By tone we mean the condition of the muscular walls. When I raise my arm out at right angles from my body, the steadiness with which I keep it there is determined by the tone of the muscles of my arm. In the same way the gastric musculature needs tone. It must keep a weight, which is its own food contents, maintained in a certain position. If the column of our barium meal is evenly distributed with the walls of the stomach about the same width apart everywhere, the tone is good. If the food has all accumulated at the bottom of the stomach, and the walls are spread out and relaxed the tone is poor. This is one of the serious defects again of the gastrophtotic stomach—lack of tone. In certain forms of reflex irritation of the stomach, as from appendix disease, or tabes with gastric crises, the tone is excellent, there often being hypertonus.

4. Movements. These cannot, of course, be studied on the plate alone. Every prop-

erly conducted examination of the stomach should begin with a fluoroscopic examination when we can see the stomach in action. Many fascinating studies have been made lately upon the gastric movements. They are too complex for us to repeat here, but I should like to refer you to the writings of Carlson, Alvarez, and Cannon which you will find in many issues of recent medical journals.

5. Emptying Rate. This fact too, of the very first importance, can only be determined by the use of the fluoroscope or by multiple plates. The barium meal should be entirely out of the stomach at the end or six hours. It is delayed by (1) obstruction at the pylorus, either from organic disease such as pyloric ulcer, or cancer, or from reflex spasm due to gallbladder disease or chronic appendicitis, and very often slight obstruction from constipation; (2) lack of tone of the gastric musculature as in gastrophtosis, and atony.

6. Outline. The outline of the stomach wall. This is in most individual cases the most important element in the X-Ray examination. Upon it depends the diagnosis of early carcinoma, and upon it usually depends the diagnosis of gastric or duodenal ulcer.

One of the great triumphs of American medicine in the last decade has been to establish the fact that whenever ulcer is present there is a definite defect in the outline of the stomach shadow, or in the shadow of the duodenal cap. The Continental observers, whom I mentioned a little while ago, Haudek, Holzknecht, and their associates, who were the first to make extensive observations on the gastro intestinal tract with the X-Ray, used fluoroscopes, and they built up a somewhat elaborate system of symptom-Complexes which were, they claimed, pathognomonic for various conditions. These symptom-complexes, however, were never very satisfactory in actual practice. I remember very well the trouble we had trying to make them fit an individual case. Haudek and Holzknecht, however, were opposed to trying to use plates. They stated very dogmatically that plates would not show up, in ulcer, any dependable signs. They admitted of course

that plates were invaluable in carcinoma, but in ulcer they were unable to find anything.

To this dictum several American radiologists took exception. The leaders were Dr. Lewis G. Cole of New York, Dr. A. W. George of Boston, and Dr. James T. Case of Battle Creek. Dr. Cole, who has a genius for technique, published some plates describing the duodenal cap and later showed that when an ulcer is present in the duodenum there is a small break in the regularity of its outline. Later this same method was demonstrated as applicable to ulceration in the stomach. We depend not only on these small defects at the sight of the ulcer, but also upon a spasm, or incisura, of the stomach wall opposite the ulcer. It must be certain that this spasm is not simply a normal peristaltic wave which has been caught on the plate apposite the ulcer defect. For that reason we insist that the incisura appear on several plates and that it will not disappear when we give the patient a dose of atropine to relax the muscle spasm, and stop peristalsis.

Besides the break in the regularity and the incisura there is one other curious sign of an ulcer, which is rarely seen, and usually only when there is an ulcer on the lesser curvature. This is a pouching of the wall so that the barium goes in to an actual sacculation and has above it a gas bubble like a miniature stomach.

With these facts in mind we can turn now to our plate. We have seen that the shape and position are normal. The position is slightly to the right, but not enough to cause us to pay much attention to it. The tone is also good: we see the stomach holding its contents in an upright position and exerting pressure upon them. Under the fluoroscope the peristalsis of this stomach was vigorous, and the emptying rate is reported as much longer than six hours. Both of these facts are significant. Why with vigorous peristalsis should we have a late emptying rate? Why unless there is considerable pyloric obstruction? A low grade obstruction in a stomach with good tone would cause peristalsis to be vigorous, and even so, the

stomach would not empty soon. Incidentally we have in this vigorous peristalsis what is probably the explanation of the patient's gastric pain.

Now in looking over the outline I see nothing in the stomach itself that would be considered a defect. Turning to the duodenal cap however it seems to me that on one side of the triangle there is a definite irregularity. The duodenal cap is normally triangular in shape, the base usually, but not always connected with the stomach by a thin line of barium. Now on this one side of the triangle the line is broken up, the line is not smooth, but granular. It is just such an irregularity as might occur if there were a break in the continuity of the mucosa, an ulcer, and if around the ulceration there was an induration making the wall stiff and inflexible. I believe on this evidence we may say that the patient has a duodenal ulcer of considerable size.

Out-Patient Clinic of Dr. Damon Walthall

PURULENT PERICARDITIS—DISCUSSION OF CASE

This condition may be outlined under three heads:

First: Pericarditis is a very uncommon condition in infancy and childhood. However, its occurrence in fetal life has been reported, and cases have been described as young as six months of age, but the most frequent period when it does occur is between the ages of three and twelve years.

Second: Pericarditis is one of the most frequent conditions in infancy and childhood that goes undiagnosed and unrecognized many times until autopsy.

Third: It is desired to bring to your attention one subjective symptom and one objective physical sign that in all textbooks and reports are not given the proper emphasis for their importance. (a) The physical sign is elicited by percussion, and it is a dulness in the 5th interspace to the right of the sternum. The importance of this sign was first brought out by Dr. Rotch, of Harvard, and the best description of the sign is in Keating's Cyclopedie of Diseases of Children. Dr. Cabot, in his Physical Diagnosis,

says this may be confused by the liver dullness. (b)—The subjective symptom to which your attention is especially attracted is not mentioned in any textbook, except Holt's Diseases of Children, and then without emprasis or detail. The symptom is vomiting whenever medicine, food, or liquids are given. This is due to the inflamed and greatly distended pericardium resting on the esophagus, and whenever anything passes down the esophagus into the stomach it causes pain and a reflex stimulus which causes vomiting. This case to be reported was not diagnosed or recognized until exodus was imminent, and then as the history and physical findings were reviewed, it was surprising that they could have been interpreted in any other light.

The following is a brief history given by the mother: On January 7th a small boy, aged four and one-twelfth years, who had no hereditary tendency to disease, and who had been previously healthy, except for whooping-cough at the age of three years, was admitted to the hospital. During the week of December 25th he was complaining, and feeling very much under-par, but there was no definite symptom. The acute and severe illness began on December 30th, (eight days before entrance)—with pain in the pit of the stomach, which was severe enough to cause him to cry, but did not cause him to double up. There was no omiting, and a stool resulting from cathartic and enema was normal. On December 31st, (seven days before entrance) the pain in the pit of the stomach had gone, but there was slight tenderness in the lower abdomen at this time, and whenever medicine or water was given, there was vomiting. The family physician was called, and made a diagnosis of "Intestinal Indigestion", and instituted appropriate treatment. The patient continued much the same, except that he did not sleep well, and the abdomen became much distended, and remained that way. The highest temperature was 100°. The vomiting, whenever the medicine or liquids were given, continued.

On the day of entrance, (Jan. 7th.) a Pediatrician saw the boy and found the condition as described above, but with a temperature of 101°. He thought the diagnosis a "Ruptured Appendix." A surgeon was called in and he thought there was no abdominal condition, but that the diagnosis was either Pneumonia or Empyema.

In Jan. 6th and 7th the patient's appetite was good, but whenever medicine or food were given there was vomiting. The mother noticed that the respirations were heavy, labored and rapid; that they caused distress and a marked grunt; that the urine was scanty, bright color, and very hard to start.

Physical examination showed a well-nourished and developed boy acutely ill,—pale, restless and with a tendency to lie on his right side. There was cyanosis of the lips; respiration rapid and labored, with a definite grunt; the lips dry, crusted, caked and syanosed; the tongue was red, with a marked coat; the teeth were in very poor condition, showing a few cavities, and all very dirty with much tarter.

LUNGS: The left was clear. Right;—there was dullness over the lower lobe posteriorly, and front, in fourth and fifth interspace to the right of the sternum.

HEART: Sounds were regular, very rapid, moderate strength, and no murmurs.

PULSE: Was rapid, weak, and not good quality.

ABDOMEN: Very marked distention, tympanitic, soft,—no masses or tenderness.

Liver and spleen not felt. Otherwise the examination was normal. W. B. C. 25,800—HGB 80% (Sahli)—Von Pirquet—12 hours negative. Jan. 8th there were no additions to the above findings, except for the lungs showing many rales, and besides the tympanitic abdomen, there was noted in the epigastrium a small tumor the size of a duck's egg, which was dull. This tumor did not feel like a distended gut, but a collection of fluid. Rectal examination was negative. XRAY: Showed a typical picture of a pericardial effusion.

PARACENTESIS: Was done, in the fifth right I. C. S. close to sternum. 250

c. c. of thick pus was withdrawn. The smear showed a large number of streptococci (long chain). On the night of Jan. 8th the child died. No autopsy could be obtained.

In conclusion, the points to be considered are:

I. The one sign most frequently thought of in pericarditis of adults, but which is the most elusive in children, is the classical friction rub. It is uncertain,—because in infants; where the purulent pericarditis in 70% to 90% of cases follows pneumonia and is caused by the pneumococcus, this sign is masked by the lung signs; again the tendency toward an effusion in a child is very much greater than in an adult, also it forms with greater rapidity, and most generally it is purulent. Thus the classical sign is quickly prevented.

II. (a) Large effusions affect the functional activity of the heart early, giving a very rapid heart action—that is, with a moderate temperature of 100°, the pulse will range at 150. or more. (b) Here another one of the supposed cardinal signs of pericarditis, "The diminished heart sounds by auscultation, in the adult"—cannot be applied. This is because the small size of the infant's and child's chest brings the heart and pericardium very much nearer to the anterior surface normally, as well as when a large effusion is present. Therefore the sounds remain quite distinct throughout the illness.

III. The most trustworthy sign is the one in which the absolute dullness is outlined by percussion in the fifth right interspace, and extends as much as three to six cm. to the right of the mid-sternal line.

Normal measurements of the right border of the heart from the mid-sternal line are: 2 cm. in infancy: 2.5 cm. at 6 yrs. of age: 3 cm. at 12 yrs. of age.

IV. The next group of signs in importance are: Rapid, guarded respiration,—and anxious expression, with which there is cautious breathing, because the pain prevents a complete respiration and there appears to be a feeling that obliges the respiration to be cut short, and this produces

a cyanosis, restlessness, and typical dyspnoea and orthopnoea.

V. The symptoms are indefinite and unsatisfactory for the most part, except: First:—Pain, which is difficult to locate, but is usually precordial or in the epigastrum. Second:—Diminution and increase of the urine is noticed as the effusion increases or diminishes—(i. e.) in this case there was very scanty urine.) Third,—and most important symptom, is vomiting on taking of fluids, food or medicine.

Clinic of Dr. E. P. Hall

Carrie H., colored, age thirty-one was referred to my service April 1, 1920, by Dr. J. W. May, with tentative diagnosis tumor of orbit, probably of nasal origin. Marked exophthalmos, left eye displaced outward and downward, vision O. D. 15/15, O. S. 15/50. Eye could be rotated any direction. Veins rather tortuous, but otherwise normal, fundus left eye. Blood Wassermann, negative. Urinalysis: Trace albumen, numerous gram negative and gram positive diplococci.

Patient gave following history: November 1919 first had pain in left eye ball. Eye seemed to quiver and could not stand light for rest of day; none of these symptoms have recurred since this time. Two months previous had severe attack of influenza, but without any head symptoms or pneumonia. January, 1920 vision seemed to fail in both eyes—things would blur. Visited physician who prescribed salve to be rubbed in axillae, and drops. Thought her vision improved, but abandoned treatment after one month. Latter part of February began to notice displacement left eye ball. Aside from "neuralgic pains" that side of face for a period of two weeks has had no discomfort—these have now disappeared.

Family history unknown.

Personal history negative. Twice married. One child of thirteen living and well by first husband. No miscarriages.

Physical examination: No pus in nasal chamber; no evidence sinus infection. Tumor mass palpable under supra-orbital ridge to nasal side left orbit—not tender to pressure.

Radiographic findings: Very large frontal sinuses—clouded. Necrosis of superior border orbits, especially left. Absence floor left frontal sinus.

Operation: April 8th. A curved incision from root of nose through left eye-brow, separating soft tissues in line of incision, revealed ragged edge of supra-orbital ridge. (Pressure of tumor had caused absorption of roof of orbit in this region.) The smooth gray wall of sac of tumor presented below supra-orbital ridge. Effort to deliver this sac only resulted in its rapture. Its contents which gave color to the wall of sac, a gray gelatinous substance, was removed by means of large glass syringe. The sac was found to occupy both frontal sinuses with a prolongation along inner side orbit almost to entrance optic nerves, and was thoroughly removed. Dura presented through inner table frontal bone in two localities. No attempt was made to probe naso-frontal duct. Wound packed with iodoform gauze after partial suturing of incision. Pressure bandage applied. First dressing showed very little reaction no disturbance motility eye ball.

Within few days sinuses were discharging copious purulent material. After about three weeks interval this began to abate, and the bony cavity being well covered with fine granulations. June 9th, patient was again anesthetized and through original incision the anterior wall of nasal frontal duct was removed sufficiently by rasp to admit introduction of short silver catheter (portion of urethral catheter slit at both ends and sprung to hold it in position.) This catheter was introduced through the nose into the naso-frontal duct by covering distal end with $\frac{1}{2}$ gelatine capsule. External incision closed.

Patient made uneventful recovery, external wound closing in about two weeks. Purulent secretion in nose gradually decreased. Passing of an application through silver catheter insured its patency.

At the time of patient's release from hospital June 29th, left eye was in normal position, and scarcely more secretion in nasal

chamber than would be excited by the presence of a foreign body (silver catheter.)

Refraction ten days later:

O. D. 15/15-2
O. S. 15/70
O. D. 15/15 w. 25 ax 90
O. S. 15/15 w. 1.50 ax 90



BEFORE



AFTER

The pathologic findings by Dr. A. R. Wahl follow: Small portion wall of sac lined with ciliated epithelial cells. Probable dermoid cyst.

Out Patient Clinic of Donald R. Black, M. D.

A SEVERE CASE OF DIABETES

The reason for reporting this case, is to emphasize the importance of newer laboratory methods in the control of diabetes. I shall confine myself principally therefore to the factors concerned in the production of acidosis, the methods employed for its early detection and the management of this frequent complication.

The patient, a physician forty-five years of age, came to the Laboratory of Bell Memorial Hospital in December, 1919. To his personal knowledge, he had had diabetes for six years, and had been making a thorough study of the subject in order to handle his particular case in a scientific and rational manner. He had established his carbohydrate tolerance and had rigidly adhered to it during the course of his illness. He was not aware of the exact date of onset of the disease, but noticed polyuria, weakness and thirst in 1918 when he was compelled to resort to an extremely low diet, trying to so arrange his protein and fat as to give him the required calories and still maintain sufficient reserve to resist the troubling furuncles which had been manifest in the past few weeks.

In December, 1918, he came to the Laboratory for a general blood and urine examination; also for advice as to the management of his low carbohydrate tolerance. He had been living for the past three months on a diet consisting of fish, meat, soy-bean gems, soups, peanuts, black coffee and butter, refraining as nearly as possible from carbohydrates. During the past three months he had kept tabulated tables of the food taken, and we found that his average total calories for twenty-four hours, had been between eight hundred and one thousand. I was at a loss to understand how a man could be so active as he had been on such a low diet.

His urine analysis was as follows: Specific gravity, 1.022; straw color; acid; sugar .2%; quantity, 1600 cc in twenty-four hours; diacetic and acetone, negative; Blood sugar .2%, that is 200 mm per 100 cc. Carbon dioxide combining power of blood plasma, 40 cc.

He was told to fast for twenty-four hours and return. At the end of this time his urine was sugar-free, but the reaction was positive for both diacetic and acetone. His blood sugar was .16 per cent. and the carbon dioxide combining power of his blood plasma was 36 cc. He was told to so arrange his diet, using urinary sugar as an index, so that his protein and carbohydrate would be increased at the expense of fat. The idea being that he could get more calories into his ration, at the same time taking care of his impending acidosis.

He carried out his instructions for two weeks; at the end of that time his urine contained .2% of sugar, no diacetic acid or acetone; his blood sugar .2%; carbon dioxide combining power of blood plasma 44. We concluded that he should carry out the same procedure and report at the Laboratory in one month.

He failed to report on the agreed time but came to the Laboratory August 15-20th. He had changed his diet on several occasions, following up some idea he had gained from the literature and from personal observation. However, he assured us that his total food consumption for 24 hours had not averaged over 800 calories. Carbohydrate was extremely low.

He has been unable to balance his diet. If he reduces his carbohydrate sufficiently to make his urine sugar-free, he develops an acidosis as evidenced by the appearance of diacetic and acetone.

If he eats enough carbohydrate to relieve his acidosis, his urine contains sugar. He has been unable to arrange his fat intake with any degree of satisfaction. His urine, following protein fat diet showed Sp g 1.035 and no alb. sugar 1.8% diacetic and acetone present in large amounts.

The next day, following a test meal containing 1 slice of bread, the diacetic and

acetone had disappeared but 2.5% sugar was present.

He refused to enter the hospital and we told him that we were unable to be of definite service to him unless he would consent to stay in the hospital a sufficient length of time for his case to be thoroughly investigated.

DISCUSSION: We know that if a normal individual lives for three or four days on a carbohydrate free diet, the urine voided on the following morning will show a reaction for diacetic acid with ferric chloride. Naujyn called this type of acid intoxication, "Acidosis". Acidosis is produced by the accumulation of three bodies: Oxybutyric acid, diacetic acid, and acetone. These bodies are all excreted through the breath. Benedict has shown that acidosis is produced by fasting. One of his subjects at the Nutrition Laboratory constantly showed evidence of acidosis during his fast of thirty-one days.

The source of acidosis is not to be found in carbohydrates as Gerhard and Ludergen have shown, but marked acidosis may be produced on a fat-protein diet, also that this acidosis may be increased by combining muscular exercise with the diet. Furthermore the degree of acidosis is relieved by balancing the diet with carbohydrates. It has been repeatedly shown that by increasing the fat intake, acidosis is increased. In fact it has been shown that oftentimes the acidosis can be controlled by manipulating the fat intake. There seems to be little question at present that fat is the principal source of Oxy-butyric acid, that is, 210 grams of fat are capable of producing 72 grams of oxy-butyric acid. Of less importance is protein: from 120 grams of protein, 36 to 40 grams of oxy-butyric acid may be produced.

It is an interesting fact that the amino acids of the protein molecule which lead to the production of sugar, produces no oxy-butyric acid, and those which lead to the production of oxy-butyric acid, produce no sugar. Probably diacetic acid and oxy-butyric acid exist in fixed proportion and

acetone may be looked upon as an oxidation product of the former. Acidosis in diabetes is not unlike experimental acidosis in healthy individuals, except that the diabetic develops acidosis more rapidly because most of the carbohydrate that he eats is lost to his metabolism.

Holuland has described fully the method by which blood retains its slightly alkaline reaction. He mentions three important lines of defense by which the body protects itself against acidosis:

I—Sodium carbonate (occurring both in the plasma and in the cells.)

II—Acid and alkaline phosphates of potassium found almost entirely within the red blood cells.

III—Proteins.

Let us consider the blood as a colution of bicarbonates. There is constantly being formed in the body a large amount of carbonic acid. This acid must be removed by the lungs and must be transported to the lungs by the blood stream. There is enough Carbonic acid produced daily in an adult to equal several hundred cubic centimeters of concentrated hydrochloric acid. If it were not for the laws that govern the reaction of colutions of weak acids and their salts, that is the ability which carbonates in solution have to take up relatively large amounts of acid without themselves undergoing appreciable change in reaction, that is, buffer action. It can readily be seen that the reaction of the blood would quickly become acid and death would result. The respiratory center is very delicately adjusted, so that when an excess of acid is formed respirations are more rapid and a greater amount of carbon dioxide is lost thus lowering its concentration in the blood stream. Acids may also be removed by the kidneys, leaving behind a part of the base with which they were combined, this base being available for further neutralization, in other words, the kidney has the capacity to execute an acid urine from a neutral or slightly alkaline blood stream by excreting acid phosphate and saving one molecule of base with each molecule of acid phosphate excreted.

Stored alkali offers another safe-guard. Aside from stored sodium and potassium, we have the calcium and magnesium of the bones, which may be called upon in emergencies. An extremely important factor in maintaining alkalinity, is the ability of the organism to excrete nitrogen in the form of ammonia instead of urea. The importance of this fact will be understood when we realize that one gram of ammonia neutralizes five times as much oxy-butyric acid as one gram of sodium bicarbonate. Possibly the last line of defense of the body against acidosis is the role played by the proteins. The amphoteric nature of proteins enables them to combine either with acids or alkalis without undergoing appreciable change in reaction themselves.

As for the detection of acidosis several things are necessary:

I. Examination of the urine.

The mixed twenty-four hour specimen should always be used and the amount voided should be noticed; the specific gravity; color; reaction; sugar, (both quantitative and qualitative); diacetic acid and acetone, ammonia and a careful microscopic examination of the sediment. We use in our Laboratories, Benedict's quantitative and qualitative solutions for all sugar determinations. We believe that the results obtained are more satisfactory than those obtained by other methods. It is unnecessary to go into detail regarding the technique of the various tests employed, therefore I will mention only the ones I regard most practical for the clinician.

The test for oxy-butyric acid is complicated and not available for use in ordinary routine practice; as a matter of fact, for ordinary purposes, diacetic acid and acetone furnish adequate information.

For diacetic acid, Gerhardt's ferric chloride test is quite satisfactory and is very easily performed at the bedside or in the office. For acetone, Legal's sodium troprusside gives excellent results, and is quite easily performed. For ammonia, the test most easily performed, although possibly not quite so

accurate, is the Rouchere-Malfatte formaldehyde test; the technique can be carried out in ten minutes in any office. It is of the utmost importance for the clinician to find the twentyfour hour ammonia output because the quantity of ammonia excreted in the urine is a direct measure of the reaction of the body to counteract acidosis. To this extent the estimation of urinary ammonia in grams for twenty-four hours gives a more accurate idea of acid products in the body than any other test. The usual output of ammonia varies between .5 and 1 gram in twenty-four hours; in some cases of acidosis it may reach as high as 7 to 8 grams.

II. Examination of the blood.

Until comparatively recently we were compelled to satisfy ourselves with the information derived from clinical observation and urinary examination, but at present we have at our command other tests which are invaluable in the correct management of every case of diabetes, and fortunately, tests that may be easily made in the clinician's small laboratory. It is impossible to say at present, just what concentration of blood sugar must be present before we may expect glycosuria. Different figures are given, varying from .09 to .16%. There are so many factors that may produce variations that probably no fixed figure can be given to apply to all cases.

The question of renal diabetes is an extremely interesting one; also the role played by different kidney lesions on the excretions of solids. Certainly there is a large field for research in this particular. However, we can say that at present the normal blood sugar is from .06 to .11% and that any figure over .110 mg. for 100 cc may be considered excessive. In diabetes we find figures from .1 to .4% in some cases higher findings have been reported. At present the chief value of blood sugar determinates, is the fact that suspicious cases may be detected at an earlier date than with urine examination; and further, when patients become sugar free, we have definite index for further treatment, still further by blood sugar determinations, we are enabled to handle the question of

renal glycosuria more scientifically. The methods usually adopted are:

I. Lewis Benedict's.

II. Bang.

And I might mention that for clinical work, I find the Kuttner-Leitz Universal Micro-Colorimeter, quite satisfactory.

Of the methods in use for detecting acidosis from the standpoint of blood and alveolar air, those of Marriot and Van Slyke have gained the most favor.

VanSlyke has devised a unique instrument for determining the carbon dioxide combining power of the blood plasma. The instrument is inexpensive and the technic easy. Normally the reaction of the blood is such that 100 cc of blood compares with 40 to 65 cc of carbon dioxide. In acidosis the figures are lower, as you will recall the present case when fasting for twenty-four hours, developed acetone and diacetic acid in the urine and his Van Slyke reading dropped to 36.

Marrot's method for detecting the carbon dioxide content of the alveolar air is very satisfactory for patients who are not in deep coma. The chief disadvantage of this method is the fact that one must have the co-operation of the patient which is not always possible.

Literature abounds with methods of management of advanced acidosis and coma in diabetes. I shall confine myself to a few remarks about the management of the impending acidosis.

After having satisfied one's self that the patient is a true diabetic, and from the results of the bio-chemical methods, is assured that the patient is verging on toward an acidosis, the question at once arises: what is the most logical treatment? Shall we give the patient large doses of alkalis? Shall we fast him or shall we gradually bring him from his regular diet down through a definite system which first eliminates fats; second proteins; last carbohydrates by which time the patient may fast until sugar-free without increasing materially his acidosis?

The question of Alkali Therapy is indeed

interesting; theoretically, the diabetic needs alkalis. Wilken has shown that Glycolysis in the blood stream and organs is hampered when the reaction of the blood becomes a trifle less alkaline than normal. But on the other hand, one must remember that alkalis given over a long period of time may set free acid bodies existing combined and harmless in the body.

Joslin states that between September 1915 and March 1917, but three of his hospital cases received alkalis; he says that often a patient on the verge of acidosis is sent into coma by the injudicious use of alkalis. I think the following regime is fairly satisfactory:

If the patient has become accustomed to the fasting method of treatment, continue, but if he has been on a full diet, give one gram of carbohydrate per kilogram of body weight during twenty-four hours in orange juice or gruel; give 1000 cc. of liquids in each six hours, the liquids to be given slowly and hot, that is, coffee, tea, and thin broths. If the patient is unable to retain so much by mouth, salt solution may be given by the rectum. Move the bowels by one or more enemas; cathartics should be avoided.

I believe most cases will respond to the above method of treatment without recourse to alkalis.

R

Accessory Sinus Disease and Choked Disk

Harry Cushing, Boston (*Journal A. M. A.*, July 24, 1920), is convinced that suppurative processes in the ethmoid cells adjacent to the optic foramina may set up similar disturbances in optic nerves. But what is inconceivable to him is that these processes should produce choked disk. Inflammatory processes may affect the optic nerve in such a way as to produce reddening, injection and possibly such a degree of hyperemia and vascularity of the nerve head as to resemble the early hyperemic stage of a choked disk, but it is unbelievable that an infection of the accessory nasal sinuses in the absence of increased intracranial tension should produce an actual choked disk. Cushing feels that on the part of the rhinologists, the statements which accompany their papers are extraordinarily unconvincing.

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WHAT IS IT WORTH TO US?

Several communications have been received relative to the right of osteopaths to use or prescribe drugs in their practice. The Medical law, under which the Board of Medical Examination and Registration was created, provided for the registration of osteopaths in the following paragraph of Section 6:

"All persons who practice osteopathy shall be registered and licensed as doctors of osteopathy, as hereinbefore provided, but they shall not administer drugs or medicines of any kind nor perform operations in surgery."

That was before the osteopaths had persuaded the legislature to pass their law and give them a separate board of examiners. A recent copy of the Medical Practice Law of Kansas shows that the paragraph quoted above has been eliminated and in its place the following appears: "This act shall not apply to any registered osteopathic physician or any chiropractic practitioners of the State of Kansas."

The situation seems to be that an osteopath is exempt from the provisions of the Medical Practice Law and there is nothing in the osteopathic law restricting his use of drugs or medicines nor preventing his doing surgical operations. The chiropractor, however, is limited by the law providing for the

appointment of a chiropractic board of examiners, to practice chiropractic only. Neither the osteopath nor the chiropractor can be prosecuted for violations of the Medical Practice Law for both are specifically exempted from its provisions.

There was a session of the legislature a few years ago, when it seemed very likely that a one-board medical law could be passed. In fact, a quite large percentage of the members of the legislature were pledged to support such a measure. Some of the older and wiser men in the profession, however, thought it inexpedient; and an effort was made to secure the passage of more elaborate and comprehensive legislation which would not disturb the already existing boards, but create an additional board which would first pass on the qualifications of every candidate for a license.

The purpose of the one-board law, as proposed, was to compel every applicant for a license to pass the same examination so that only those who were qualified by education, training and experience to understand the human body and its diseases would be permitted to practice the healing art. Being properly qualified they might be permitted to restrict their practice to certain classes of disease or to certain methods of treatment if they desired. There is every reason to believe that such a law would meet the approval of the people generally. It would not appeal to the various sects of substitutes for doctors that now infest the country. For some reason, it does not appeal to a large percent of the regular practitioners. Such a law should be approved by the people because it would give them some assurance that every man who was licensed to practice the healing art was competent to determine the nature of their ailments, at least to the extent that modern knowledge and modern methods make possible. The various sects of substitute doctors would oppose such a law simply for the reason that they are not sufficiently well qualified to meet any standard of requirements that could be safely agreed upon.

There is no good reason for opposition by the regular profession. The competition of these substitute doctors is not now a matter of much concern; but, if these men were well grounded in the fundamentals of medicine they would undoubtedly see the importance of limiting their practice to those cases in which their methods may be applicable. Under such a law we would have simply a little more elaborate system of specialized practice. We would have, as now, those who limit their work to certain kinds of disease, or to diseases of certain organs of the body; and we would have those who limit their practice to certain methods of treatment, such as electro-therapy, hydro-therapy, mechanical therapy, etc. The objections made to the osteopath and to the chiropractor are mostly that on account of his lack of knowledge of the etiology and pathology of disease he attempts to treat all diseases by the same method.

We have all these sects in medicine and it is likely that they will continue to be with us; it seems, therefore, that the best policy would insist upon such improvement in their qualifications as to render their practice as nearly free from danger to the innocent public as possible.

There are questions, however, that should concern us more than the type of regulative that may be secured. Why should we seek to secure legislation tending to elevate the standard of qualifications for the practice of medicine? The advance in medicine has not been the result of legislation. The advanced courses in medical instruction have been brought about by medical men, and legislation has followed, but never has preceded these advances, and has never kept pace with the advancing standard of requirements of the medical schools. In so far as the status of medicine is concerned, no legislation is required.

It has been quite thoroughly demonstrated that, no matter how high the standard of qualifications set by legislation, no such legislation will prevent incompetent and unqualified substitutes for doctors undertaking the healing art. And it has also been

demonstrated that the higher the standard of qualifications and the more rigid the requirements, the more prolific will be the production of such substitutes.

There is certainly no thought in our minds that any such legislation will lessen competition or in any way favorably affect the financial side of the practice of medicine. The very great increase in the time required for a medical education and the considerable increase in the cost of the same, have very noticeably diminished the medical college output, but this is not in consequence of any legislation that has been enacted.

There is no angle from which this kind of legislation can be viewed as specifically beneficial to the medical profession, but the people look with suspicion upon any effort to enact legislation for their particular benefit by those upon whom they depend for a particular kind of service and especially so when such legislation is intended to regulate that service. The politicians, at least that class of politicians to be found in our legislative assemblies, are unable to appreciate a purely altruistic motive in any group of men seeking legislation that will restrict or regulate their own particular interests.

Since such laws are of more vital interest to the people than to the medical profession it would seem advisable, for a time at least, to permit the people to devise and inaugurate their own plans for their own protection. And in the meantime it might be worth while for us to seek legislation more directly beneficial to ourselves.

There is a law in Kansas which makes it a misdemeanor, or some other criminal offense, if one does not pay the hotel or boarding house for the meals he has eaten. It is no more necessary that one should have the services of a doctor when he is sick than that he should have food when he is starving. There are no more people that intentionally starve than there are those who intentionally get sick. It is just as reasonable to say that one should always be prepared for the possible emerg-

ency of illness as it is to say that one should never be without the means to pay for food. The doctor is quite as much entitled to protection against those who refuse to pay for his esrvices as are hotels and boarding houses. The medical profession will be quite as successful and very likely more successful, in getting such legislation than it has been in securing purely medical laws. There is neither room nor need for sentiment in connection with such an effort. There is not a county in the state that does not make provision for the care of the sick poor. In most of the larger cunties this provision is entirely inadequate, it is true, but this is the fault of the county commissioners who habitually underestimate the requirements for caring for the sick poor. The commissioners underestimate these requirements because the doctors have always given gratuitous service to a large majority of these people and because they have always done so they are expected to do so. But there is no more reason for the doctors assuming the burden of caring for these people when they are sick than for the hotels and boarding houses assuming the burden of feeding them when they are hungry.

R

THE CREDIT AND COLLECTION BUREAU

This Bureau was authorized by the Council of the Kansas Medical Society last January, and has now been in operation for about four mon'hs. The plan upon which the Bureau is conducted is somewhat similar to that of the merchants' association. The collection of overdue accounts is only one of its purposes. The ultimate success of the Bureau will depend upon the development of its other purpose, which can be inferred from the plan as outlined. When your list of oerdue accounts is received by the Bureau a card is made out for each debtor. On this card will appear the name and addresses of the debtor, his occupation and such other information as we are able to secure, the name of the doc'tor or doctors he is indebted to and the amount or amounts he owes. Other data concerning his account

are added as indicated. These cards are filed in a cabinet, are numbered, and are indexed alphabetically and by counties.

After the first notice is mailed a sufficient time is allowed for a reply to be received. If nothing is heard from the debtor, more and more urgent letters are sent and the debtor is informed that the doctors in every county will refuse the calls, or demand cash in advance, from those who are reported as delinquent debtors. When it is evident that the debtor does not intend to pay, his name is placed on the delinquent list. A list of such delinquents in each county is mailed to the Secretary of the County Society, who is requested to furnish a duplicate list to each member of the county society. It is then up to the members of the County Society to make the plan a success in that coun'y. If every member of the society will demand cash in advance from every one of these delinquents, it will be but a short time until the collection department will be unnecessary. As soon as people learn that doctors will insist upon being paid for their services, just as other business men do, the dead beat element will disappear. There are a good many of this class that are depending upon the inability of the medical profession to cooperate in any such movement as this. They still hope to get their doctors for nothing as they always have, and if there are any of us who want to accomodate them there is nothing in our constitution and by-laws to prevent, but it is certain that in so doing he will help neither himself nor the other doctors in his county.

Since the Bureau has been in operation, we have found many varieties of the devitalized vegetable. There are many of course who really find it difficult to meet their obligations, but there are many who are quite able to pay but, for varions reasons, simply won't pay until they have to.

There are a good many who prefer to bluff their creditors, and these are not easily managed. We feel confident that it would, in many such cases, be better to immediately bring suit for collection. Among the accounts sent to the Bureau, there are a few

that, on general principles, should be made to pay and we feel sure judgment could be secured. Of course, there is nothing to be gained by bringing suit against a man who is judgment proof.

On account of the request from several members that their claims be pushed, we have arranged with Mr. Arch M. McKeever to act as attorney for the Bureau and to him we will refer all those cases that require suits to collect, if so desired by the doctor interested. In all such cases it will be necessary for the doctor to make a deposit for court costs, on amounts under \$300 the deposit required is \$3.00, on amounts of \$300 and over the deposit required is \$15.00. This deposit will be returned in all cases where judgment is secured. In all cases, where suits are brought the following fee schedule will apply:—

Fifty per cent commission on all amounts collected amounting to \$25.00 or less.

Fifteen per cent commission on all amounts collected from \$25 to \$300.

Eight per cent commission on all amounts collected from \$300 to \$1000.

Those who have sent claims to the Bureau will be advised if cases are found among their debtors that for any reason should be sued. In no case will a suit be brought unless definitely authorized to do so by the doctor. In no case will a suit be advised if there seems to be a possible chance to collect the account otherwise. In no case will a suit be advised unless there is some evidence that a judgment could be collected.

The original plans of the Bureau have not been changed in any particular. Accounts sent in will be handled just as before. Delinquents will be reported to county societies and those against whom suits are brought will be reported as delinquents and so recorded in our files.

A commission of 10% is due the Bureau on all payments made on accounts sent for collection, except when such accounts have been referred to the attorney for suit, then the commission will be due the attorney when collections are made and according with the schedule given above.

Etcetera

Your best friend? Yourself. But do not get too familiar with him. Keep noticeably aloof. Familiarity breeds contempt for him and then for others.

Skepticism is a road leading to progress, but when travelled on too far brings the skeptic out at the same hole he went in. The man who closes his mind and is not receptive to new ideas is a little fertilizer factory within himself and generates undesirables.

The non-recurrence of leprosy or of any symptoms of it for one year, in the forty-eight cases reported cured in Hawaii, is at least heartening, even if the disease should return. A year will give a man a chance to die of a respectable decent disease.

When emetine fails in amebic dysentery, try the old fashioned pulverized ipecac root.

The coccus which has been isolated from the virus of trench fever patients was found in the excreta of dirty lice. It was not found in the excreta of clean lice. This shows that there is hygiene even among lice. And further, if a man insists on wearing lice he should be compelled to have them laundered occasionally.

Utah has a lower infant mortality than any other state, according to the report of the National Children's Bureau. This results largely from the clinical service given to the expectant mother and the instruction and educational work of public health associations.

The old idea was that calomel was a hepatic only. The new idea is that calomel stimulates all the glands of internal secretion, with a special affinity for the thyroid and suprarenals. Calomel got a bad name from its association with ignorance. There is no other one single agent that will combat as many toxins as calomel given in small doses, sufficient to stimulate the glands of internal secretion.

It is a poor rule that won't work **one way**. A man spends his time in preparing himself to practice medicine. Time is his investment, his asset, and it is charged up in his fee together with his labor. When this man, a doctor, spends his time and labor, which is more valuable now, in investigation and experiment and invention; and discovers a remedy or invents an instrument or device by which humanity is immeasurably benefitted, the doctor is not permitted to charge

for his time and labor. To the average man such a rule is as clear as mud and utterly devoid of reason.

Endocrinology is being given increased attention by some of the best minds in the medical profession. Disturbances of glandular relations are responsible for so many of the impractical ailments that a physician is called to treat and expected to cure—and because so many cases are relieved by the administration of glandular substances. Thyroids, Corpus Luteum, Pituitary, are specific and standard remedies and other substances are coming into frequent use. Where diagnosis shows that more than one gland is not functioning properly, one may prescribe two or more substances in capsule form with desirable results.

Some of the glandular substances that have not been employed extensively like Parotid, Prostate, Orchic are now being used quite freely. Literature concerning the manufacture of the Endocrine Gland and other Organotherapy preparations by Armour and Company will be sent to members of the medical profession who desire it. The volume of production that is reached by Armour and Company has made them headquarters for the Organotherapy preparations and their discussion of their properties is of considerable interest.

"While bubonic plague is under control in this country, there will always be scattered infection until the rat can be exterminated," said Surgeon General Cumming. "The most effective measure is permanent rat proofing of all buildings. Plans for this may easily be incorporated in any new construction. While the Public Health Service can concern itself directly only with the problem of plague prevention, there is an important economic problem that enters into this situation, due to the fact that at the present time, according to authoritative estimates, there is one rat for every one person in the United States. To maintain this huge number of rats costs the people of this country approximately one cent per person every day for rat food, and intolerable and unnecessary burden for the people to carry."

The American Child Hygiene Association will meet in St. Louis, October 11, 12, 13. The Central States Pediatric Society will meet in St. Louis on October 13, 14. On the 13th there will be a joint meeting of these two bodies. The very keen interest which is being generally shown in child welfare

justifies the prediction that this will be a very popular session.

Because some raw foods are healthful there are "daffs" who say all foods should be eaten raw. Aside from the germ and parasitic dangers in the raw foods, the starchy foods and cereals shold be cooked to get all the meat in the cocoanut.

If theer were no extremes there could be no mean. It is better for the sane man that the vegetarian and carnivora are with us.

When baby is not doing well, or in deficiency diseases, include orange or tomato juice in the menu. Canning does not destroy the vitamin in the tomato. Grape fruit and lemon juice are full cousins to the orange and tomato by way of the vitamins.

Excess flesh foods—meat, fowl, fish—produce acids in the blood and favor putrefaction in the digestive tract and hence acidosis. Excess of proteins taken into the digestive system work the liver and kidneys overtime and they demand extra pay in vitality. Excess of beans and peas are secondary only in their tax on vitality. They contain some purins.

Man appears to be a hybrid in the demands of his physical make-up and has the appetite to meet the situation, but is lacking often in knowledge and stamina to turn the trick.

Soft foods only are not healthy after infancy. Hard bulky foods are essential in maintaining a healthy human body and contributing to its growth. Chewing not only prepares the food for complete digestion by grinding it fine and mixing the saliva in it, but it favors healthy teeth. It is said "the Igoro's of the Philippines have perfect teeth so long as they live on hard coarse food. But civilization ruins their teeth when they change to soft foods." But what would become of the dentists if we all lived and fed right? Why a doctor and a lawyer? For the same reason—we don't.

The gland specialist has knocked H. of the H. C. L. by grafting the glands of the turtle into the hen. The hen lays but one egg a day, the turtle lays fifteen eggs a day. Comment unnecessary. However, it makes the hen lead a strenuous and short life. The shallow covering of the turtle egg is leathery and tough. This quality is imparted to the hen-turtle egg and the egg can be handled the same as a rubber ball. This is in favor of the hybrid egg in commerce but what will the mob use on the speaker?

Yellow corn contains more fat than white corn. From time immemorial the old farmer has said that yellow corn was stronger, had more food value, than white corn. He did not know the whyfor, but he knew the result or practical part by feeding it to his stock.

Col. Robert McCarrison (Br. Med. Jr.) says that the endocrine organs are profoundly influenced by dietetic defects. All of these organs except the adrenal glands and the pituitary body undergo more or less atrophy and depreciation of functional capacity as a result of dietetic deficiencies. The adrenal glands and in males the pituitary body, enlarge in consequence of dietetic defects. The adrenalin content of the enlarged adrenals is increased when the food is deficient in vitamines and protein and disproportionately rich in starch. The adrenalin content is diminished with a scorbutic diet, and when concurrent affections are associated with diabetic defects.

There have been many remedies proposed for gall stones. Among the very popular ones was olive oil. The most recent one, perhaps, is an infusion of parsley, one and one-half pints to be taken daily. The cure is perhaps quite as complete as that by any of the other remedies; and quite as long in duration as is the interval between the attacks of colic.

Pritchard (Br. Med. Jr.) says:—"Recent laboratory and clinical experiments suggest that both deficiency of certain food elements as well as excess of others may both lead to conditions of malnutrition. There was to my mind at one time a serious risk of the deficiency diseases overshadowing the excess diseases. It certainly has been my clinical experience that a larger number of cases of malnutrition are due to excess, and can be cured by cutting down, than to deficiencies which can be corrected by supplementary supplies.

It has been suggested that resistance to disease has been reduced by the more common use of refrigerated meats and preserved foods, lacking in vitamines. Brown, Blackpool, Eng. observed a greater resistance to influenza among those who had been plentifully supplied with fresh vegetables and legumes.

There is at least some therapeutic evidence to support the theory that acute edema of the lungs is not due to a gross defect in the action of the heart but to the reflex effect of a pathologic stimulus acting through the

vegetative nervous system in a vagotonic individual according to Cameron Davidson (Br. Med. Jr.). It has also been suggested that acute edema of the lungs is a vegetative syndrome indicating an endocrine disorder—suprarenal deficiency.

The editor of the British Medical Journal writes, "We do not wish to be understood to speak scornfully of technical acquirements, still less to be regarded as adherents of the armchair medical philosophers who excited Sydenham's contempt. But we think there is a tendency to overrate the importance of technique, and that intensive graduate education of the kind administered in the American scheme is not so wholly admirable as some may be inclined to assume." ***** "Real mastery of a technique is not obtained in three or in thirteen years of intensive training; dexterity may be so acquired, but not judgment."

It is stated that before the war there were 4000 doctors in Petrograd, but at the present time there are only about 800. Most of the others have died of starvation, overwork and epidemic diseases. Now they are regarded as Government employees with a monthly salary of from 4000 to 6000 roubles and double rations. They are allowed a half pound of bread a day and one public meal consisting of soup and horse flesh. Most of their work is done on foot.

Lindstrom treats abscess cavities by injecting vaseline into them. One or more very small incisions are made through which the pus is squeezed out. Melted vaseline is then injected through the opening until the cavity is filled or distended. The opening is closed with a cold compress until the vaseline stiffens, then removed.

The claim that acute edema of the lungs may be due to suprarenal deficiency is not borne out by the results of experiments reported by McCarrison, who found that when the adrenalin content of the enlarged adrenal gland was high edema occurred in 86 per cent of cases but when the adrenalin content was low edema did not occur.

The American Relief Committee for Sufferers in Austria, 261 Madison Avenue, New York, of which Hon. Frederic Courtland Penfield, late American Ambassador to Austria-Hungary is Honorary Chairman, has created a special fund for the relief of destitute Viennese physicians and surgeons.

Contributions may be made to Alvin W. Krech, President, Equitable Trust Company,

37 Wall Street, New York City, Treasurer of the Committee.

The following is extracted from some remarks by Dr. Arthur Dean Bevan at a conference on Medical Education:—"A few weeks ago a man came into my office and said he had been to a great clinic where they practice group medicine in the best possible way. He was an intelligent man. He had been put through a machine. He said: 'Doctor, I went there, and I was most carefully examined for a week. They X-rayed my teeth; they X-rayed my chest, my stomach and my intestines. They made an examination of my blood; they took what they call a Wassermann test; they made an examination of my feces and of my urine. They made an exhaustive and thorough examination, and when they got through they said: 'Well, Mr. So and So, we cannot find anything wrong with you. You go back home; you are run down; you need to eat more and not work quite so hard.' This man was excited; he pulled out his handkerchief and with a trembling hand wiped the perspiration from his forehead, and remarked: 'Doctor, I have lost fifty pounds, and I am so sick that I cannot do my work.' This man had been through a machine and did not have the benefit of the personal element in medicine. He had a marked exophthalmic goiter without any visible goiter. The diagnosis was made in an instant by a clinician who had personal control of the situation, the minute the man took his handkerchief out of his pocket and wiped his forehead, and said he had lost fifty pounds and could not do his work, the diagnosis was clear. It is in personal element that the art of medicine comes and is something we cannot get away from. Again medicine as a profession in this country is a means whereby about 150,000 men earn a livelihood. Our problem is not a simple one, but I think will be worked out."

Volstead Jaundice or Jaundice of the **Still** is a freak newspaper disease. The lay press says: "It is the first in medical records" and "caused by minute particles of metal in moonshine whiskey not distilled through copper coils." This new disease originated in Kentucky. To be specific in Louisville. Dr. Ellis Owen, Assistant Health Officer of that city, spotted the disease. Dr. Owen said the liquor causing the outbreak contains just enough poison when a large portion of the white liquor is taken, to over-burden the liver and eliminatory system so completely as to break them down. The disease may be

brought on by drinking steadily for several days or a large quantity at a time. Some fifty cases have been reported in Louisville. In all probability these cases are wood alcohol poisoning or what is practically the same thing, excess drinking of raw ordinary moonshine liquor by those persons accustomed to drinking old whiskey. It would be safer now and henceforth for the Kentucky folks to learn to drink water.

Thanks to the development of appropriate methods of physiologic assay, digitalis preparations can now be evaluated in terms of their real potency, and products can be prepared which are stable and constant as the pharmacopeial standards demand. Physicians have learned, largely through the leadership of Cary Eggleston, how to estimate digitalis dosage on the basis of body weight. As the possibility of overdosage can be recognized by the occurrence of symptoms such as nausea, or by the electro-cardiograph, it becomes possible to push the dosage speedily to the limit of tolerance, with corresponding therapeutic advance. There remains, however, the important need of differentiating more clearly the patients for whom digitalis is actually indicated: (Jour. A. M. A., Aug. 7, 1920, p. 417).

Despite the numerous efforts to demonstrate the efficiency of this or that chemical agent or drug as a gastro-intestinal antiseptic, the outcome has been that the supposed benefits were due to catharsis in most instances rather than to any real effect upon the bacteria in situ. Similarly, J. F. Norton, in an investigation made for the Council on Pharmacy and Chemistry, has shown that the value of "antiseptic" and "germicidal" soap depends on the soap and not on the antiseptic or germicide contained in them. In fact, ordinary toilet soap and the green soap used by surgeons was more efficient, evidently because the added antiseptic and germicides interfered with the lathering qualities of the soap (Jr. A. M. A., Aug. 14, 1920, p. 478).

Quinin is a protoplasmic poison, and tissue necrosis may be caused by strong solutions of quinin salts. That this deleterious reaction actually does occur and has mitigated against the general use of quinin and urea hydrochlorid is confirmed by the report of the Committee of the A. M. A. on the Advantages and Disadvantages of Local Anesthesia in Nose and Throat Work. The committee reported that the only local anesthetic that produces edema and sloughing is quinin and urea hydrochlorid. The committee

found that, as this local anesthetic has been abandoned in other fields of medicine, so it has been discarded for use in nose and throat operations. Two physicians who had published articles extolling the value of quinin and urea hydrochlorid in nose and throat operations now state that they have discontinued its use, though they had not published this unfavorable conclusion (Jour. A. M. A., Aug. 21, 1920, p. 559).

The Schick test, which can readily be applied to a large number of persons, makes it possible to differentiate those immune from those susceptible to diphtheria. It also facilitates the attempt to increase the number of the immune by suitable prophylactic toxin-antitoxin injections. By the use of the Schick test and toxin-antitoxin injections, institutions have been kept free from cases of diphteria for years (Jour. A. M. A., Aug. 21, 1920, p. 545).

According to a report of the Medical Research Committee of Great Britain, silver salvarsan is apparently a molecular combination of arsphenamine and silver in some form. The substance is on trial, and its promiscuous use at this time would be ill advised. In the United States no license for the sale of silver salvarsan has been granted by the Treasury Department and hence it may not be sold in interstate commerce (Jour. A. M. A., Aug. 28, 1920, p. 626).

Men between the ages of eighteen and twenty-five who have had at least a common school education, and are interested in the study of pharmacy, chemistry, first aid and surgery, dentistry, materia medica, bacteriology, roentgenology, anatomy, physiology, nursing, hygiene and sanitation, dietetics, surgical technique who desire to improve their education and to travel, at the same time receiving satisfactory pay should consider the Hospital Corps of the Navy as a field for endeavor.

Young men leaving school who are unable to attend college will find in the Hospital Corps an excellent opportunity to improve their education, to fit themselves for useful occupation in civil life after two, three or four years of Naval service.

The first of a series of regional health conferences authorized by the International Health Conference in Cannes is to be held in Washington, December 6-13. It will be devoted to a consideration of venereal diseases which, according to conservative estimates, constitute one of the world's most terrible plagues.

The conference is being organized under the joint auspices of the U. S. Interdepartmental Social Hygiene Board, the U. S. Public Health Service, the American Red Cross and the American Social Hygiene Association. Prof. William H. Welch of Johns Hopkins has consented to serve as president, and already assurances have been received that some of the foremost physicians and sociologists will participate. Prominent health officers and sociologists from all parts of North and South America will attend.

B EXCERPTS

BY THE PRODIGAL

Some Things We Have Learned

1. We have learned that a surgical operation does not complete the treatment of patients in a large percentage of cases; and that the internist must complete it.
2. The better hygienist an dietitian the internist is the more successful he is in his practice.
3. The better connoisseur of blood pictures the internist is the better understanding of his patient's condition and the more intelligent and worth-while prognosis he can make.
4. The droplet is a means, or a way, of conveying disease, not in the operating room only, but in all cases of communicable disease; and scrupulous care and protection should be exercised by the internist in examining a patient with a contagious disease, such as diphtheria or scarlet fever. He should protect himself by wearing a face mask and spectacles and should direct the nurse to do the same when in close proximity to the patient.

5. Acidosis is common and the blood test for it should be used as systematically as the thermometer in fever.

6. The great value of bicarbonate of soda in maintaining the alkalinity of the blood. It is said to be "the first line of defense against acidosis." Logically then it would appear that alkalis would be an antidote, always, for acidosis. But, as some one has said, logic when followed to its limit must either make the venture of faith or lead the fag end of thought to split and ravel into the occult.

7. Life cannot continue with the slightest acid reaction of the blood and acidosis is where the alkalinity of the blood is below normal. It is said that an increase of the hydrogen-ion concentration of the blood of one gram in ten million liters promptly causes death.

8. Two types of tubercle bacilli are recognized—the human and the bovine. They are antagonistic to each other. An infection by one renders the patient immune to infection by the other. This is as it should be for either one is too much.

Am I Right?

A medical journal serves the purpose to the medical profession that a secular newspaper serves to the general public. The specialized medical journal serves the medical journal serves the medical specialist in the same way that the technical scientific journal serves the technician in his handicraft. How best to serve the mixture in a medical society journal is a more difficult task than to meet the demands of the medical specialist journal.

It is taken for granted that the purpose of a State Medical Society Journal is to help to establish, build up and maintain the identity and individuality of the profession in a restricted area—the State. It is in this medical journal way that the state is known, professionally, outside of its bailiwick.

The name, **State Medical Society**, can be assumed but its individuality can be maintained and grow on merit only.

The worthiness of a medical society and of its exponent, the medical journal, is measured by the vigor of its own vitality (the *vis a tergo*.) pushing ahead and making its influence felt at home and abroad and in upbuilding self, that it may benefit the whole.

The strength and usefulness of a medical democracy (society) depends upon the intelligence and effort put forth by each individual unit in the society to make a working whole. Hence each member of the society must contribute his mite to fill up the family record complete. The Editor and a small minority of the members of the family cannot con-

serve the interest of the whole medical family in its entirety.

To get the best results, and the society and journal to get what is due them, there must be no slackers. The crucial test for a slacker and some of the positive diagnostic symptoms of a slacker are, lack of interest in his medical society; careless and indifferent towards his society journal; picks it up when he can get nothing else to read, scans it and throws it in the waste basket; attends medical society intermittently, never prepares and reads a paper or takes part in the discussion nor sends an item to his medical journal.

If his medical society is not interesting or his medical journal is not readable it is his duty to help make them worth while. The physician who does not take a vital interest in the living medical issues of today soon becomes hap-hazard in his practice, more or less of a floater, a guesser, a dependent on authority, seemingly forgetful that he has the same machine to work with and on—the human body—as the other fellow.

Encouraging

The X-Ray disease is now recognized in the nosological catalogue of diseases. In fact, it occupies most of the space in the catalogue. This dogmatic statement is made on the assertion by Sir James McKenzie "that from 90 to 95 per cent of the complaints which the panel (city) physician sees are undiagnosable even by the most experienced, and most of the small percentage that are diagnosed according to present methods would fail to convey an accurate notion of the real nature of the illness."

Such a statement from such authority is encouragement to the average medical man and to the medical profession. It acknowledges man's fallibility, necessity and opportunity. It is encouraging to the conscientious physician to feel that when he cannot tell what the disease is, that he is called upon to treat, or when he has made a mistake in diagnosis that he is not necessarily an ignoramus, derelict nor a criminal. It also encour-

ages him to watch for mistakes, and keep an eye on himself.

There is danger, however, that the lazy and conscienceless man may use Sir. James' statement as a fence to hide behind. Hence it may be better to look upon the statement as errant. The dogmatic statements are encouraging to the profession in that the leaders of it realize that there are weak places or links in the medical chain to be located and the chain strengthened.

Pituita

Names, like our habits,
Are prolific as rabbits.
They surely do stay
In language, though they
No meaning convey.
'Twas Galen who said,
Long 'fore he was dead,
A gland in the head
The Mucus did shed
Through a nose quite red.
Pituita named,
Its meaning retained,
But those who are trained
Have mostly proclaimed
No mucus has drained
From this gland so famed.
His fancy was strained,
This man who thus claimed
And honor obtained
From logic so maimed.
This gland that was found,
And others abound
In functions profound
That sometimes confound
The tissues around.
And still it is known,
This gland that has grown
A rank of its own,
By a name applied
For functions denied.

R

Congenital Facial Paralysis

Two additional cases of this condition are reported by Frank R. Fry, St. Louis, Mo. (Journal A. M. A., June 19, 1920), who has now seen three such cases. The symptoms in each case were typical and in none was there any evidence of hereditary origin or of birth trauma.

SOCIETIES

Joint Meeting—Ninth and Tenth Districts

One of the best medical meetings ever held in Western Kansas, was at Colby on July 20th, 1920.

This was the first meeting of the component medical societies of the ninth and tenth Councilor Districts to be held since the war and an effort was made to make it a meeting really worth while. It was an ideal day and a good turnout was there when the program commenced at 10:30 A. M. in the Commercial Club rooms. Dr. F. H. Smith was made chairman, who called the meeting to order and surrendered the gavel to Dr. D. R. Stoner temporarily while he gave a very able report of five cases of "Encephalitis Lethargica" he had observed in his own practice. A brisk discussion followed. It was the consensus of the opinions expressed that this condition was much more prevalent than it appeared to be.

An adjournment was taken at noon for luncheon at the Opelt Hotel.

The balance of the program was given at the moving picture theater.

Dr. C. D. Blake gave a very interesting paper on "Fractures at the Elbow" illustrating the points taken up in the paper by X-ray plates. A very spirited and interesting discussion followed with nearly all present taking part.

Dr. Wm. C. Lathrop's paper, "The Acute Abdomen" was carefully prepared and covered nicely the prominent points present, in the diseases and conditions prevalent in the abdomen. Almost every doctor took part in the discussion and much good came out of it, not only to the surgeon but to the general practitioner as well.

Dr. B. K. Kilbourne very ably discussed the "Venereal Peril." He urged the physicians to devote more time to the diagnosis and treatment of venereal diseases. Two reels of moving pictures were given to drive home the points made in the address.

Dr. W. W. Duke of Kansas City, wired it would be impossible for him to be present to read his paper on "The Glands of the

Internal Secretions in their Relation to Health and Disease."

Dr. John Outland came in by airplane and gave a very interesting talk, illustrated by pictures of his Alaska hunting trip. The Doctor arrived late in the afternoon, consequently a number of physicians were compelled to leave before the lecture.

This was indeed a wonderful meeting.

The program was immense, the attendance good, the interest intense, and the feeling among the physicians fine.

The following were present:

Doctors—Smith, Nicholson, Nelson, Taell, Blake, Beckner, (E. D.) Van Diest, Lathrop, Miller, Herrick, Jeurink, Tinney, Pegg, Hennenberger, Becker (E. J.), McIrwin, Stoner, Gulick, Eddy, Kenney, Pope, Kilbourne, Outland, Lowis, Bantleon, Butler, Browne, Carter, Parker, and Bundy.

A short meeting of the Decatur Norton County Society was held and Dr. Jay Smith of Noreatur and Ebner Reaves of Oberlin were voted into membership of of that society.

C. S. Kenney, Councillor 9th Dist.
D. R. Stoner, Councillor 10th Dist.

Harvey County Society

The Harvey County Medical Society met at the Halstead Hospital in Halstead, Kansas, on September 6, 1920, as guests of the Hospital Staff. The Doctors present were Drs. Lucena C. and J. T. Axtell, A. E. Smolt, G. D. Bennet, Olsen, L. T. Smith, Max Miller, J. W. Wedel, M. C. Martin, V. E. Chesky, H. H. Norris, W. E. Regier, R. H. Hertzler, A. E. Hertzler, E. L. Kalbfleisch, Pace, Hashinger, Holley, H. M. Glover, McMillion, Frank L. Abbey and Technician J. Barlow.

A splendid dinner was thoroughly enjoyed in the dining room of the Hospital, after which the regular routine Lasine's was taken up. The Censors reported favorably on the application of Drs. Edward Hashinger, Agnes Hertzler, J. D. McMillion, Henry H. Olsen and W. W. Holley to become members of the Society. On motion made, seconded and

carried the applicants were elected to membership.

Dr. A. E. Hertzler gave a brief description of the "Nickelson treatment of Fracture of the Patella" and in answer to questions gave more details of its use. Dr. Olsen gave an interesting account of a case of Myxedema now under treatment with Thyroid Extract. Dr. Hashinger described and presented specimens of a "Bilateral Tubal Pregnancy," one ruptured, the other not ruptured, presented a very interesting and unusual case. Dr. Holley reported a case of "Unusad Pararectal Inflammation" and asked for a diagnosis. Some discussion followed this report. Dr. Chesky gave a paper on "Tumors of the Large Gut, Exclusive of the Rectum." This was followed by the exhibition of "Some interesting Gross Specimens just obtained," by Dr. McMillion. All of the papers were illustrated by Lantern slides thrown on a screen by J. Barlow.

Altogether the program was of a decided scientific trend and made a favorable impression upon the members of the Society of the quality of work being done by the Staff. A vote of appreciation was given by unanimous consent. Dr. Hartzler invited the Society to meet at the Halstead Hospital again in September, 1921. Dr. J. T. Axtell asked the privilege of entertaining the Society at the Axtell Hospital at the next November meeting. Both invitations were accepted. Adjournded.

Frank L. Abbey, Secretary,

—R—

C. & C. Bureau

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accounts, give the name in full if possible, the occupation if known or can be learned, the correct address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

Present addresses wanted for the following:

Last known address

Anglemeyer, James.....	Eldorado, Kans.	Mallou, E.....	212 W. 8th St., Topeka, Kans.
Baird, Zeb.	Chetopa, Kans.	Martin, C. J.....	Frankfort, Kans.
Beach, Chas....Topeka Towel Supply, Topeka, Kans.		Metzpa, E. J.....	220 N. Lawrence, Wichita, Kans.
Buesing, Mrs. Louis.....	Healdton, Okla.	Miller, J. I.....	Wallace, Kans.
Baker, Lee.	Lincoln, Kans.	Milligan, Mrs. E. E.....	Eureka Springs, Arkansas
Benning, Clarence E....2034 N. Walnut, Kansas City, Kans.		Morrow, G. W.....	Redfield, Kans.
Binkley, Clarence....811 Kans. Ave., Topeka, Kans.		Morton, G. F.....	Partridge, Kans.
Blue, Mrs. Myrtle.....813 Monroe, Topeka, Kans.			Haven, Kans.
Boerner, Mrs. George.....2031 Hallock, Kansas City, Kans.		Pattison, Urban.	Moline, Kans.
Bowe, J. P.....527 Monroe, Topeka, Kans.		Penick, Frank....1200 S. Emporia, Wichita, Kans.	
Bowers, J. Clark.1731 Garfield, Kansas City, Kans.		Pennick, N.J.....	R. 28, Topeka, Kans.
Brainard, F. D....1920 N. Lawrence, Wichita, Kans.		Perkins, Mrs. Jennette..718 Rural St., Emporia, Ks.	
Bra·field, G. M.....Council Grove, Kans.		Phillips, T. C.....	Cottonwood Falls, Kans.
Brooks, Joe.....525 N. Emporia, Wichita, Kans.		Reed, W. Ernest..1055 N. Main St., Wichita, Kans.	
Erown, B. H.....Wellington, Kans.		Rogers, A. J.....	Care Coleman Lamp Co.
Burk, James.....	Chetopa, Kans.	Stuart, E. L.....	250 N. Emporia, Wichita, Kans.
Burns, Claude A.....	Elk Falls, Kans.	Schmidt, Wm.....	1702 Manning St., Winfield, Kans.
	Coffeyville, Kans.	Sewell, John.....	551 E. Gordon St., Topeka, Kans.
Bush, Frank.	Chetopa, Kans.	Seymour, Ray....1600 E. 8th St., Kansas City, Mo.	
Carlins, J. J....Metropolitan Life Ins. Co., Topeka, Ks.		Shepard, Monroe.316 Lafayette, Kansas City, Kans.	
Cheeben, Ralph.	Grenola, Kans.	Snepp, Mrs. Bessie....6 Neosho St., Emporia, Kans.	
Collins, Harry G....2211 Sandusky, Kansas City, Kans.		Sondergard, H. O.....	Metropolitan Life Ins. Co., Topeka, Kans.
Cook, H. O.....Police Dept., Topeka, Kans.		Sturdy, A. O.....	c-o Santa Fe, Topeka, Kans.
Cottrell, R. C.....R. R., Topeka, Kans.		Taylor, J. S.....	520 S. 2nd St., Arkansas City, Kans.
Creeach, R. L.....Coffeyville, Kans.		Thomas, Leo.	Winfield, Kans.
Crosser, Jasper.	Iowa	Tingler, W. J.....	907 E. 6th Ave., Winfield, Kans.
Davis, Mrs. Minnie.....417 Tyler, Topeka, Kans.		Twombly, Leroy.	Dunavant, Kans.
Davis, Oscar....127 Lafayette, Kansas City, Kans.		Ticer, Wm.	Emporia, Kans.
Dollar, Theodore.	Chetopa, Kans.	Vail, G. E.....	706 Lakeview, Emporia, Kans.
Fairhurst, Edw.....	Atchison, Kans.	Vaught, L.....	Americus, Kans.
Ferguson, Geo....2503 N. 5th St., Kansas City, Kans.		Wadley, W. F.....	114 E. 14th St., Topeka, Kans.
Fisher, Mrs. Wm.....R. 1 Box 28, Topeka, Kans.		Walker, M. B....2612 N. 5th St., Kansas City, Kans.	
Foerester, Chas....421 N. Handley, Wichita, Kans.		White, L. W....	404 Greeley, Kansas City, Kans.
Freudle, Everett....c-o Santa Fe, Topeka, Kans.		Whitten, C. C.....	Carpenter, Kansas City, Mo.
Fromish, W. W....1304 N. Water, Wichita, Kans.		Williams, Oscar.	Pittsburg, Kans.
Gibson, Will.....104 E. Larmie, Atchison, Kans.		Wilson, U. G....	424 Paramore Ave., Topeka, Kans.
Gilman, Albert.	Henryetta, Okla.	Wood, D. W.....	251 N. Main St., Wichita, Kans.
Gilstrap, Phil....619 W. 6th St., Topeka, Kans.			
Grant, Netter W....1950 N. 3rd St., Kansas City, Kans.			
Harrison, G. D.....Marysville, Kans.			
Hall, W. M....South 14th St., Kansas City, Kans.			
Hart, T. J.....	Redfield, Kans.		
Hayes, A. L.....	Cedar Vale, Kans.		
Hubble, Abe.	Chetopa, Kans.		
Humes, Mrs. G. S....3rd & Greeley, Kansas City, Kan.			
Jacobs, Earl.....Lawrence St., Topeka, Kans.			
	Baldwin, Kans.		
Johnson, S. S.....1616 Clay St., Topeka, Kans.			
Karnes, Wm.	Chetopa, Kans.		
	Neodesha, Kans.		
Kelley, O. W.	Moline, Kans.		
Lakey, L.	Chetopa, Kans.		
Lamb, E. P.	Moline, Kans.		
Large, John.	Chetopa, Kans.		
Lee, James.....507 S. 22nd St., Parsons, Kans.			
Letcher, E....1911 N. Mills, Kansas City, Kans.			
Lewis, Bert....322 N. Washington, Wichita, Kans.			
Littrell, John.	Leon, Kans.		
McClean, B. H....1526 N. Quiney, Topeka, Kans.			
McCoy, E. F.	Garden City, Kans.		

R

BOOKS

Medical Clinics of North America

Volume IV Number I (New York Number, July, 1920). By New York Internists. Octavo of 370 pages, with 44 illustrations. W. B. Sanders Co., Philadelphia and London: 1920. Issued serially, one volume every other month. Paper \$12.00. Cloth \$16.00 net. Consisting of six numbers per clinic year.

The first article in the New York number of the Medical Clinics of North America is a clinic by Nellis B. Foster on nephritis. Harlow Brooks has an article on the complications and sequelae of influenza. Bandler discusses puberty and climacterium. Wessler discusses the diagnosis of encapsulated pleural effusions and shows some very fine plates. Cary Eggleston has a very instructive article on the treatment of advanced heart failure. There are contributions by Epstein, Herrick, Cecil, Mosenthal, Kraus, Marks, Boas, Bauman, Crohn, Nilson, Neuhof, Macklin, Rosenbluth and a very interest-

ing article by Kahn on the clinical significance of acidosis.

The Duodenal Tube and its Possibilities

by Max Einhorn, M. D., Professor of Medicine at the New York Post graduate Medical School; Visiting Physician to the Lenox Hill Hospital, New York City. Octavo of 122 pages with 51 illustrations. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, \$2.50 net.

As an illustration of what genius may accomplished in medicine, this book of Einhorn's is worth reading. The first chapter describing the various efforts to reach the duodenum from the mouth, and the evolution of the duodenal tube is very interesting to read. The author, however, has intended to make his book instructive and has done so. The technic is carefully described and the diagnostic significance of the findings made plain. The various appliances for use in connection with the duodenal tube are described and illustrated. The author has certainly contributed something of inestimable value to the study and treatment of digestive disturbances.

Hygiene, Dental and General

by Claire Elsmere Turner, Ass't Professor of Biology and Public Health in the Massachusetts Institute of Technology; Ass't Professor of Hygiene in the Tufts College Dental and Dental Schools; with chapters on Dental Hygiene and Oral Prophylaxis by William Rice, Dean, Tufts College Dental School. Published by C. V. Mosby Co., St. Louis. Price, \$4.00.

The author has covered his subject quite thoroughly, in fact, one is inclined to the opinion that he has spread his subject out somewhat. He has, however, presented a very clear and comprehensive statement of what is generally accepted as good hygiene. He has given a very excellent chapter on immunity in which the theories are explained in very understandable terms. In the chapter on sex hygiene the author has a good deal to say about heredity, the prenatal care and infant care but very little about sex hygiene. Taken as a whole, it is a very excellent presentation of a very important subject.

Exophthalmic Goiter and its Nonsurgical Treatment

by Israel Bram, M. D., Instructor in Clinical Medi-

cine. Jefferson Medical College, Philadelphia, etc. Published by C. V. Mosby Co., St. Louis. Price \$5.50.

In his preface the author expresses the hope that he may be able to convince the reader that exophthalmic goiter does not belong to the realm of surgery. In his discussion of the treatment the author modifies what might otherwise appear to be a dogmatic assertion. He concedes the wisdom of removing the tumor mass in those cases of Graves' disease superimposed upon an old simple goiter. He also suggests the removal of nasal polyps, diseased tonsils and adenoids, or a chronically diseased appendix, when these may appear to be the exciting causes of thyroid hyperactivity. The author has indeed made a valuable contribution to medicine in this treatise on exophthalmic goiter.

Epidemic Encephalitis

(Encephalitis Lethargica)

by Frederick Tilney, M. D., Ph. D., Professor of Neurology, Columbia University, Attending Neurologist, the Presbyterian Hospital and the New York Neurological Institute; Consult-Neurologist, Roosevelt Hospital, New York and Hubert S. Howe, A. M., M. D. Instructor in Neurology, Columbia University, Assistant Visiting Neurologist, the Presbyterian Hospital, New York. Published by Paul B. Hoeber, New York. Price \$3.50.

The authors have compiled the results of clinical studies of this disease and observations made upon certain groups of cases that cover the recognized clinical forms in which encephalitis may occur. The volume is primarily a collection of case reports chosen to illustrate both the typical and the atypical features of epidemic encephalitis. The onset, symptoms and history of the cases are given, together with the clinical, neurological and laboratory findings.

The cases are carefully analyzed with reference to the etiologic factors and the pathologic findings.

Diseases of Children

presented in two hundred case histories of actual patients selected to illustrate the diagnosis, prognosis and treatment of the diseases of infancy and childhood, with an introductory section on the normal development and physical examination of infants and children, by John Lovett Morse, A. M., M. D. Professor of Pediatrics, Harvard Medical

School; Visiting Physician at the Children's Hospital, and Consulting Physician at the Infant's Hospital and at the Floating Hospital, Boston. Third Edition—Published by W. M. Leonard, Boston—Price \$7.50.

The first fifty pages of this book are devoted to the normal development and the physical examination of the child. This is followed by case histories under a proper classification and in which are given the history of the case, the physical examination, the diagnosis, the prognosis, and the treatment. A good many regard this method of presenting a subject as much superior to the didactic method and to those it will strongly appeal.

The Fundamentals of Human Anatomy, Including Its Borderland Districts

by Marsh Pitzman, A. B., M. D., Professor of Anatomy in the Dental Department of Washington University. With one hundred illustrations. Published by C. V. Mosby Co., St. Louis. Price \$4.00.

The author says in his preface that anatomy is taught in the medical school because it is of value to the practitioner and the student is interested in anatomic facts in direct proportion to their practical usefulness. In attempting to present the subject of anatomy from the viewpoint of the practitioner, we are not sure that he has rightly interpreted the anatomic needs of the practitioner. His description of the anatomy of some of the organs of the body seems too generalized to be of any practical value. His description of the microscopic structure of the kidney, for instance, strike one as being of very small practical value to the modern practitioner. One who assumes the responsibility of treating diseases of the kidney certainly should know more of the anatomy than he has given. And the same may be said of most every other organ of the body. In fact, the panoramic view of anatomy which the author has presented in this book will hardly improve the lack of knowledge of anatomy shown by the rank and file of the practitioners of medicine, which he deplores.

R

Renal Glycosuria

In the case reported by James Edgar Paullin, Atlanta, Ga., (Journal A. M. A., July 24, 1920), this disease was discovered

during the course of a routine physical examination. When the patient was first seen, four years previously, it was thought that he had so-called renal diabetes, although at that time this opinion was held without having sufficient proof that such was the case; since then, however, laboratory investigations have confirmed the clinical diagnosis. The patient made many attempts to enter various officers' training camps during the recent war, but he was always rejected because of the presence of sugar in the urine. The methods used in determining the presence of glucose in this patient were the copper reduction tests, fermentation test, the formation of osazone crystals with phenylhydrazin, and the determination of the melting point of the crystals. The percentage of urinary sugar was determined with the polariscope and Benedict's quantitative method. Blood sugar determinations were made by the Lewis-Benedict method and Epstein's method. The author believes it is fairly well established that there is a condition in which the kidney is abnormally permeable to glucose. The exact nature, cause and the factors determining this permeability are little understood. Many of the cases show many points of resemblance to phlorizin glycosuria. Among the reported cases there are varying degrees of renal permeability to glucose; whether these are early or late stages in the progress of the disease or the result of a greater or less pathologic condition of the kidney is yet to be determined. Few of the patients have been observed for a sufficient length of time to determine definitely whether they develop a true diabetes mellitus or not, although it would seem that such does not occur and the existence of the condition is not incompatible with a normal existence. In the case reported, during the four years of observation, there had been no demonstrable progress of the disease.

R

Value of Postmortem Wassermann Reactions

For nearly six years the Wassermann test has been performed almost as a routine on the blood of subjects coming to necropsy in the pathologic laboratory of the University of Louisville Medical Department and of the Louisville City Hospital. The only variation in technic has been that in the last few hundred tests cholesterolized alcoholic antigens alone have been used, but at least two antigens have been employed in each set, and each antigen has been controlled with tubes containing double the dose of that particular antigen. No result has been considered if the control contained double

the dose of antigen has shown any anti-complementary tendency. The results are reported by Stuart Graves, Louisville, Ky. (Journal A. M. A., Aug. 28, 1920). The findings in nearly 500 necropsies in which Wassermann tests have been made post-mortem do not conform to those of Symmers, Darlington and Bittman. In 73.5 per cent. of 492 cases the postmortem serology harmonized with anatomic findings or clinical histories, usually with both. The serums were unfit in 9.9 per cent. of cases, the incidence being nearly four times as much in the last series as in the first two. In this series positive reactions obtained six hours postmortem agreed with positive antemortem reactions negative reactions twenty-four hours postmortem similarly agreed. In ninety controlled cases there were flat discrepancies between antemortem and postmortem Wassermann reactions in only two. 2. In 124 cases showing evidence of syphilis, postmortem or clinical, 137 or 90.5 per cent., gave a positive postmortem Wassermann reaction. Observation of more than 15,000 reactions as correlated to clinical evidence substantiates the belief that the Wassermann test is the most delicate single test for syphilis.

B

Treatment of Combined Diabetes and Nephritis

The 100 unselected diabetic cases in which J. W. Mitchell and J. W. Sherrill, New York J. M. Mitchell and J. W. Sherrill, New York (Journal A. M. A., Aug 14, 1920), the blood urea was found below 30 mg. per hundred c.c. in sixty-seven; between 30 and 40 mg. in seventeen; between 40 and 50 in ten, and above 50 in six. The McLean urea index was found below 80 in fourteen cases. Four of these patients were clinically nephritis. In addition, there were twelve cases of hypertension with traces of albuminuria, and seventeen cases with palpably sclerosed peripheral vessels without albumin or hypertension. The treatment of combined diabetes and nephritis is conducted according to the usual principles for the two diseases. Diabetic treatment by means of a high protein diet, gluten bread and the like may be inimical to an associated nephritis with impaired nitrogen excretion; but it is readily possible to adjust the protein ration of both diseases. If meat's are forbidden in the treatment of hypertension, the diet of a diabetic with hypertension is seriously limited; but with restriction of salt, such a patient is able to choose his protein at will. In the majority of combined cases the diabetes or the nephritis or both are mild, although some-

times they are severe. There is no serious conflict in the treatment even here. The diabetes does not interfere with protein restriction for the nephritis, or salt restriction for the hypertension. There is an actual problem in providing the necessary calories. This is solved by undernourishing the patient to the point at which he can tolerate 30 gm. of carbohydrate. Incidentally, the unusually low protein ration raises the tolerance for carbohydrate. With this carbohydrate, it is possible to fill up the rest of the diet with fat without acidosis. The relief of the hypertension relieves the heart, and the patient is capable of more exercise and work than before. At the same time, the weakness of diabetes and undernutrition seems not to impair the heart, but is the greater safeguard against overtaxing. Three illustrative cases, demanding great judgment in treatment, are cited.

R

An Improved Technic for the Removal of the Gallbladder

The open method of cholecystectomy is preferred by Moses Behrend, Philadelphia (Journal A. M. A., July 24, 1920). An oblique incision is made in the epigastric region to the right of the median line. The handle of the knife is used to separate the fibers of the rectus muscle; the posterior sheath and the peritoneum are incised. A pair of Deaver's retractors raise the abdominal wall opposite the operator and two or three large pads are placed over the stomach and intestine. The position of the retractors is then changed so that they rest on the sponges, thereby pulling the stomach and intestine out of the way and making taut the gastrohepatic and gastrocolic omenta. Simultaneously the left hand grasps the liver and gallbladder, making traction on the gastrohepatic and gastrocolic omenta in the opposite direction. The right free border of the gastrohepatic omentum is then opened, and the ducts and blood vessels are exposed to view. The cystic duct is always separated from its bed before its ligation; the insertion of the cystic duct into the common duct is noted, and it is ligated close to the common duct, after it is caught with the cystic duct forceps. The proper curve of these forceps is of the greatest importance in expediting the completion of the operation. The cystic artery is always ligated close to the gallbladder. Any variations from the normal can be at once detected by this open method of operating. As soon as the cystic duct is severed, the gallbladder is stripped from its bed. The bed is then sutured, and a small caliber drainage tube is always placed at the

site of operation. The tube is left two or three days for the purpose of taking care of any leakage that may occur from the slipping of a ligature. The gallbladder is generally removed from below upward.

R

Objective Symptomatology of Foot Strain

According to Albert H. Freiberg, Cincinnati (Journal A. M. A., Aug. 14, 1920), persons who have symptoms which may be attributed to weakness of supination and adduction of the foot practically always have tenderness of the insertion of the tibiocalcaneal ligament into the sustentaculum tali, or at its posterior extremity. In such persons the tenderness is usually called forth by a pressure of less than $2\frac{1}{2}$ pounds. Most often the reading will be from $\frac{1}{2}$ pound to $1\frac{1}{2}$ pounds. Many persons who have no foot symptoms have tenderness on pressure over this point; this is also true of many persons who have no symptoms attributable to the lower extremities at all. In this group of persons, pressure of $2\frac{1}{2}$ pounds or more is usually required to call forth tenderness. Most persons with strong, symptomless lower extremities are not tender on pressure over the sustentaculum. This tenderness is to be regarded as indicative of potential weakness in adduction and supination. This is true in proportion to the ease with which tenderness is called forth. Further and more extensive experience with this test is necessary before ascribing to it a definite place as a diagnostic measure.

R

Endocrine Imbalance in The Feeble-minded

One hundred cases of feeble-mindedness were studied clinically and postmortem. Data were collected from a gross pathologic study of this series of brains and somatic organs, especially the ductless glands. In one third of the cases a microscopic examination of the glands was also made. Aplasia, hyperplasia, pigmentation and interstitial change not due to age, glandular proliferation, anomalies such as absence or accessory organs with lessened or increased function, besides special changes in the secreting epitheliums and cells of the individual and various glands are the main factors included in the summation of the changes. The evidence of gland changes without particular reference to endocrinology is so constant and multifarious that Oscar J. Raeder, Boston (Journal A. M. A., Aug. 21, 1920), states emphatically that they must be regarded most seriously. There were gland changes of one sort or another in 74 per cent. of cases. Marked gland changes occurred in 21 per cent. With the constant and characteristic bony and soft

tissue changes microsomia, lowered resistance to infection, poor circulation, loose jointedness and changes in the glands of internal secretion, Mongolian idiocy bids fair to be founded on an endocrine pathology. The internal secretions begin to exert their influence early in the life of the organism. It is known that permanent adjustments of the other glands and tissues follow on the absence of dysfunction of one gland or set of glands. In order to avoid such permanent changes as infantilism, dwarfism, acromegaly, microcephaly and feeble-mindedness, it is imperative that these conditions be recognized and remedied by supplying the deficient hormone or inhibiting the hyperfunction of a gland early in the course of the disease. After permanent adjustments have formed, improvement is difficult; with early treatment, results are often little short of marvelous. Much of the finer pathology of the ductless glands is concerned with biochemical reactions. Further studies of feeble-mindedness by physicochemical and roentgenologic research would seem to throw more light on this obscure field.

R

Prevention and Treatment of Weakfoot in Children

Three factors are mentioned by Percy Willard Roberts, New York (Journal A. M. A., July 24, 1920), as being commonly at work to disturb the fulfilment of Nature's plan for the formation of the foot, namely, improperly designed shoes, unequally developed leg muscles, and a deviation in the normal mechanical relations between the tarsus and the leg. The importance of the last is especially emphasized. Inward tilting of the heel bone lowers the inner border of the foot, and pronation becomes an established fact with the consequent evil of strain on the ligaments of the longitudinal arch. The result of long-continued strain of this nature will ordinarily be stretching of these ligaments and the production of weakfoot. The prevention of this fault in attitude is easily possible if the young foot is properly trained. Perhaps the most important single factor in the development of a normal arch is the maintenance of the upright position of the os calcis during the period of growth. In some cases it is necessary only to raise the inner border of the heel of the shoe to insure this result. In others, some firm mechanical appliance capable of grasping the heel will be indicated. In the light of Roberts' experience, footplates which press up the arch are physiologically and mechanically wrong—physiologically wrong because constant pressure on the plantar tissues interferes

with their development, and mechanically improper because the force is inefficiently applied. The desired correction can be much more readily obtained by an apparatus whose effective force is applied directly to the heel, and the permanence of the result will be more certain. Such a plate is described and illustrated by Roberts.

R

Alcohol Injections in Trigeminal Neuralgia

It is pointed out by Harvey Cushing, Boston (Journal A. M. A., Aug. 14, 1920), that deep extracranial injections of alcohol into the maxillary and mandibular nerve trunks near their foramina of exit from the skull have completely superseded peripheral neurectomies. In neuralgias limited to one of the two lower divisions and which may possibly not extend into the other trigeminal areas, alcohol injections represent unquestionably the treatment of choice. When the neuralgia has spread beyond its original area and come to involve that supplied by the adjacent division, a trigeminal neurectomy must be contemplated; but if no preceding deep injection has been given, it may be useful not only in insuring the type of the neuralgia but in giving the patient some warning as to what the numbness resulting from the neurectomy may amount to. They are sometimes useful, furthermore, in determining in doubtful cases whether the syndrome is a true neuralgia of the tie douloureux type or one of the peculiar and rare pseudo-neuralgias not amenable to relief either by injections or neurectomies. Even the extra-cranial injections are not entirely free from risk, and in no cases should they be purposely pushed to the point of attempting an injection of the gasserian sheath itself. With such perfect and permanent results as may be secured today by a trigeminal sensory root avulsion, the prolonged and repeated use of injections in refractory cases which involve more than one division should be deplored.

R

Traumatic Aneurysm of the Right Pulmonary Artery

In a case of traumatic aneurysm of the right pulmonary artery, reported by Henry C. Marble and Paul D. White, Boston (Journal A. M. A., June 26, 1920), the patient died of hemorrhage five months after the wound. Fifty-six cases of aneurysm of the pulmonary artery or of its main branches have hitherto been reported, only one of which was of traumatic origin.

R

Emergency Technic for Thyroidectomy

Willard Bartlett, St. Louis (Journal A. M. A., July 17, 1920), describes an operation

which he has found advantageous. It is performed under local anesthesia. The gravity of the operation has been reduced to something like that of ligation. This emergency technic is intended for the doubtful patients who seem too good for ligation, but in whom no positive guaranty of safety can be given after a classical thyroidectomy has been performed. The technic is described in detail and illustrated freely.

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THE JOURNAL of the Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, OCTOBER, 1920.

No. 10

The Duties of a Full Time Health Officer

DR. EARLE G. BROWN, CITY HEALTH OFFICER,
TOPEKA, KANSAS

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

At a recent conference on Public Health and Legislation in Chicago, Dr. Victor C. Vaughn of Ann Arbor, Michigan, made the statement that—"Never before in the history of this country, have there been so many people intelligently interested in Public Health Work, as at the present time". As a proof of this statement Dr. Vaughn pointed to the fact that, at the present time, there are nine bills before congress providing for Public Health Legislation.

As to the general importance of the Health Work that is being carried on, let us turn briefly to the different organizations that are interested in Public Health Work. These organizations may be classified under two heads; the official and the voluntary. The official organizations are the United States Public Health Service and the various State, City and County Boards of Health. In short, allow us to emphasize one point. Dr. Vaughn pointed to the fact that at the present time, bubonic plague is more widely distributed than ever before, but it has been held in abeyance by the local Boards of Health co-operating with the Public Health Service.

The voluntary organizations we shall merely name:

- a. The American Public Health Association.
- b. The International Health Board.
- c. The American Red Cross.
- d. The National Tuberculosis Association.
- e. The American Social Hygiene Society.
- f. The American Child Hygiene Association.
- g. The American Mental Hygiene Society.
- h. The National Association for the Study of Cancer.
- i. The National Association for the Prevention of Blindness.

It is the duty of every physician to interest himself in public health matters and the people expect him to take as much interest

in these affairs as any other question of a civic nature.

It may be considered that the doctor who is attending a person sick with an infectious disease, is the attorney for this person, while the Health Officer is the attorney for all other citizens of the community, and it is his specific duty to do all in his power to prevent the spread of this disease to other persons.

The World War opened the way for the education of the people and as a result the opportunity at the present time for health education is far greater than it has ever been before. The public health movement is rapidly passing out of the propaganda stage and is entering the constructive period. What the public wishes to know today is how diseases may be prevented. There are very few persons who do not have the utmost confidence in their family physician and the physician may be of untold help in moulding public opinion in regard to public health work.

True it was, a few years ago, that many of the physicians were not in accord with public health work, but these men are now in the vast minority and it is rare, indeed, to find a doctor who now is not in favor of this most important work and cooperating with the Health Department of his City or County.

There are very few physicians who are not believers in preventive medicine. If this is not true, why do we find physicians all over the country administering the anti-typhoid vaccine, as a result of which typhoid fever has been practically eradicated from the army. If you are able to name any doctors who do not believe in this prophylaxis, providing they are not of regular faith, you will also add that they are behind the times in other important matters. Those persons who employ a physician, have the right to demand that he will not only treat the disease but that he will also advise them as to the best methods known to prevent the

spread of the disease to the remaining members of the family.

The most important point in the selection of a Health Officer is that he must be honest and faithful, and must demand the respect of his fellow practitioners, because in many instances he will be called in consultation with them in certain acute infectious and contagious diseases. He must be absolutely fair to the sick person, yet it is his duty to protect the health of all other persons. The doctors should avail themselves of the opportunity of having the Health Officer in cases of doubt and in this way the Health Officer assumes the responsibility of the diagnosis. The attitude of the physicians toward reporting cases depends, to a certain extent, upon conditions. If the Health Officer has no special qualifications, or is solely a political appointee, it cannot be expected that he will have the confidence of the physicians of the community.

Regulations require that acute infectious and contagious diseases be reported and quarantined. If it were not considered necessary to report and quarantine these diseases to prevent their spread this regulation never would have been made. It is true that persons attempt to prevent the physician from reporting diseases and in occasional cases will discharge the doctor and employ another in the hope that he will not report the disease. Even though this should occur, it is the duty, not only of the first physician but of any others who are called, to report the case. Indirectly these doctors are the representatives of the Health Department. Likewise, in case the second doctor does not agree in the diagnosis the placard cannot be removed without the permission of the Health Officer.

The Health Officer must be a graduate of a reputable medical school and should have had extensive experience in contagious diseases. He should be a member of the County Medical Society and the other representative medical societies. This, because the majority of the physicians of the community will be members of such organizations and he cannot expect their full co-operation unless he is a member.

He must know the physicians personally and it is his duty to remind them of such details as they should omit in their handling of communicable diseases.

The City of Topeka was the first city in the state to employ a full time Health Officer. This doctor began his work with the city in 1915. At the present time Kansas City and Wichita and five Counties in the State have full time medical men, who devote their entire time to health work. I am informed from the State Board of Health that at the present time there are three other counties that will shortly employ full time Health Officers. The advantage of the employment of a full time man is that he will devote his entire time to the work.

The duties of a full time Health Officer in general are the supervision of all matters of public health and sanitation. It is his duty to prevent the spread of communicable diseases by the best known methods; to conduct systematic inspections, to isolate, quarantine and disinfect certain diseases and disseminate propaganda to the people of the community to aid in keeping the general health of the community at standard. Without health education a community is ill served by its local Health Department.

Allow us to call to your attention a few of the problems that have been met with in Topeka in the past twelve months.

At a meeting of the County and City Health Officers, at Rosedale, in May, 1919, the question of typhoid inoculations was brought up for discussion. The State Board of Health agreed to furnish the vaccine free of charge if the Health Officers would put on the campaign of publicity and administer the vaccine.

In accordance with this plan, the Topeka Health Department gave the typhoid question much publicity in the newspapers. Placards were printed and distributed over the city. These placards carried the comparison of numbers of typhoid cases in the army in 1913, with compulsory inoculation and the number of cases in Topeka in 1918. In the publicity matter issued, the point was emphasized that all persons should be inoculated. If they did not care to take ad-

vantage of the City's offer they should go to their own physician.

As a result of this campaign several hundred persons were inoculated at the City Health Department, while a great number went to private physicians. During the year 1919, there were 27 cases of typhoid fever reported to the Health Department and of this number, 3 were definite out of town infections. This was a decrease of 19 cases from the number in 1918, and of 69 cases in 1917.

It is the custom in our office to send out letters to all doctors in the city, at least once every three months, calling attention to matters that are of special importance.

It is well at all times to take counsel with the doctors. On different occasions doctors have been asked to meet with the Health Department to discuss health matters. One such meeting was at the beginning of the recent influenza epidemic. Frequently doctors are asked as to their opinions on public health subjects. When the doctor feels that his opinion is given consideration, he is the more willing to assist.

The World War placed before the people of this nation the importance of dealing with venereal diseases, of giving publicity as regards these diseases, the consequence of non-treatment and the result if no effort is made to suppress them.

On June 16th, 1919, the City of Topeka established a clinic for the free treatment of venereal diseases. Before the clinic was opened the plan was explained at a regular monthly meeting of the County Medical Society, and the idea was endorsed by the Society. Public announcement of the opening of the clinic was made in the newspapers. The first patient was a boy of 13 who came in voluntarily.

Placards have been placed in public toilets and more will be distributed this summer. The film "Fit to Fight" was given a public showing in June and again in October. Separate shows were given for men and women. An estimated total of 6000 persons attended the four meetings. Several persons came to the clinic as a direct result of having seen the picture.

In October, 1919, investigations led to the discovery of gross immorality among a certain group of school girls under 16 years of age. A total of 18 girls were brought up for investigation and of this number but one denied having had sexual intercourse. Of this number 3 were found to have gonorrhoea. A number of men were involved in the affidavits made by the girls and as a result 4 men were brought to trial and sentenced either to the penitentiary or the reformatory.

A great number of persons come into the clinic for examination who do not have a venereal disease. Others come in for examination who are able to pay for treatment, and if they are found to be infected they select their own physician and take treatment of him. The clinic is maintained, primarily, for those persons who are unable to pay for their treatment.

The clinic secures patients from many different sources: the police, welfare workers, by pick-up, orders from the Health Department, and some come in voluntarily. Others are referred by private physicians and the State Board of Health. Occasionally children are brought in by their parents.

In case a person is married every effort is made to have the husband, or wife, as the case may be, come in for examination. At the present time, there are five husbands and their wives taking anti-syphilitic treatment.

As far as possible infected persons are taken care of in the clinic but in the case of prostitutes, or persons who do not abide by the quarantine regulations, steps are taken to send them to Lansing for quarantine and treatment.

The interest in the clinic is not confined to the doctors or the persons having venereal disease. A short time ago a business man notified the Department that a young lady formerly employed in his store was reported to have a gonorrhoeal infection. Her case was investigated, she was found to have an infection and voluntarily went to Lansing for treatment. The business man paid the fare of a welfare worker to accompany this

girl to Lansing. She has returned to Topeka and now has her old position.

Legal procedure was invoked on three different occasions to prevent the carrying out of quarantine orders. Two of the writs were denied in District Court. The third was dismissed in District Court and application was made in the Supreme Court but this was also denied. Justice Burch, who wrote the opinion, held that:

1. The ordinance was constitutional.
2. The findings of a City Health Officer, in the lack of a charge of bad faith, were held to be conclusive.
3. A person ordered to be isolated at a State Institution is not entitled to a writ of habeas corpus, because he is able to provide himself with proper treatment at an isolated place in the locality of his residence.

Justice Burch further held that ". . . In this instance only those provisions of the rules of the State Board of Health and of the City ordinance are involved which relate to isolation of persons who have been examined and found to be diseased. Reasonableness of provisions relating to discovery and to examination of suspects, need not be determined. It may be observed, however, that while provisions of the latter class cut deeply into private personal right, the subject is one respecting which a mincing policy is not to be tolerated. It affects the public health so intimately and so insidiously that considerations of delicacy and privacy may not be permitted to thwart measures necessary to avert public peril."

In January, 1920, an epidemic of gastrointestinal type swept over the city. The average duration of the sickness was 36 to 48 hours, and, so far as known, there were no deaths. There were, however, two known cases of pneumonia developed following this disease. Dr. N. P. Sherwood, Professor of Bacteriology at Kansas University, and two assistants, came to Topeka and made blood and bacteriological studies of a number of cases. Questionnaires were distributed to all school children and over 3,000 of them were returned. About half of the blanks returned have been tabulated, and from the data found therein and from the bacteriological

examination, it is fairly well established that this epidemic was an intestinal type of influenza.

The influenza epidemic started in Topeka on January 21st, when 6 cases were reported. Letters were sent to all doctors calling their attention to the requirements of the Department on influenza. Although broncho pneumonia, itself, was not a reportable disease, request was also made that this disease be reported. The physicians responded willingly, despite the fact that they were very busy. In this way the Department was able to keep accurate check on the situation at all times. Doctors telephone reports of communicable disease to the office and the card is filled out when the case is quarantined. This saves the doctor time and enables the Department to place a quicker quarantine.

At a meeting of the Board of Health on February 9th, the general situation was discussed, with the conclusion that it was necessary to issue a closing order. This order was issued at once and went into effect at midnight. Schools, churches, theaters were closed. Lodge meetings, parties, social affairs and public gatherings of whatsoever nature were forbidden. The theater men took exception to the order and advertised in the morning paper that the theaters would be open as usual, and gave as their reason the following: "Our principal purpose in keeping open our theaters is to prevent the spread of panic and hysteria, and thus to protect the public from a condition of mind which would pre-dispose it to physical ills."

The theaters did not open as advertised, as police officers prevented it. The following day the theater men took the case to District Court, asking for an injunction. The Judge denied the application.

The closing order was in force 12 days. The day the order was made 157 cases of Influenza were reported. 4 days following the number of cases dropped to 61, the least number of cases reported in 8 days. The day the closing order was revoked, there were but 9 cases reported. In a statement issued March 27th from the State Board of Health the percentage of fatalities of the 10

principal cities of the State on the number of cases reported, was given as 7.2. The percentage for Topeka was 4%.

Systematic followup of children absent from school should be done. Adequate numbers of nurses should be employed for this purpose. It is important, at all times, in case children are absent to find out just why they are absent. In this way, many times, it will be possible to detect early cases of epidemic disease, and thus head off the epidemic.

In one of the Topeka schools recently there has been an epidemic of chickenpox. We secured from the Principal of the school the list of all children absent. In the first 7 families visited we discovered 10 cases of chickenpox. None of them had been reported, the parents giving as an excuse that the children had not been sick enough to have a doctor, and one mother offering the time worn excuse that "she thought her daughter might as well have it now and get it over with." In the eight families visited that afternoon there were two children with whooping cough, unreported.

With the early detection of other cases and the prompt isolation it is possible to protect other children of the neighborhood, and with the quarantine of these cases, the epidemic quickly subsided. The same condition is true in a slight epidemic of smallpox in one of the other schools. The early detection, quarantine of the cases of the known disease, with quarantine of contacts, unless satisfactorily vaccinated, resulted in a quick dying out of the disease.

It is very necessary to keep before the public matters pertaining to public health. While one of the daily papers in the city took exception to the closing order, during the influenza epidemic as regarded the schools, both newspapers have, as a rule, endorsed the work of the Health Department, not only in the news matter carried but by editorials.

In summarizing therefore, the Health Officer must be

1. A graduate of a reputable medical school.
2. Fair and honest.
- It is his duty to
 1. Enforce all regulations of the State Board of Health.
 2. Isolate, quarantine and disinfect.
 3. Keep public health subjects before the public.
 4. To be "the goat."

To do these things he must have the support of the doctors. The ideal situation is where the Health Officer, the doctors and the people work together. With this situation health laws are not needed.

R

The Small Hospital

BY T. A. JONES, M. D., HUTCHINSON

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

A hospital with less than a hundred beds is called a small hospital. There are in Kansas eight large hospitals with a total of 1335 beds, and 97 small ones with a total of 2958 beds. Our subject then covers 92 per cent of the hospitals and 70 per cent of the beds. The size of a hospital is not everything though. A home is a good hospital, with a proper nurse. But it is not economy to equip a home for one patient, and then, sometimes a patient can't pay all a nurse's salary. In a hospital one nurse can care for a number of patients and the whole fees in a hospital are no more than the nurse's salary alone in the home. There are other expenses in the home and a fair estimate is that the hospitalization of the patient cuts the expense of sickness in the family in half. But without the small hospital in this vicinity we can't have the nurse. The large hospitals supply only a fraction of the demand.

There are authorities that say a small hospital can't train a nurse. I have a letter from one. He says we should employ practical nurses. Of course this professional blue blood has never had to employ a practical nurse. If so, he would appreciate the small hospital graduate. In fact, our small hospital product is generally approved. We

would not be ashamed for her to meet this proud superintendent with 500 beds. The disrepute of the small hospital comes from lack of business method. On a sound business basis there is no reason why a hospital cannot be useful in any town large enough for a hotel.

Every doctor should be an active member of a hospital staff. Even the country doctor—the automobile has practically located him in town. We must get away from the old idea of a hospital as a towering edifice garrisoned by a few pet surgeons who pounce upon every patient at the door and snub the previous attendant. A hospital is only one of the doctors conveniences and surgery only one of its functions. Rural citizens have a right to a hospital and they are ready to pay for it whenever the doctors unite in asking it. A rural doctor who has once used a hospital will never be without it.

Of the many interesting phases of the small hospital time limits us to three—the building and equipment, the nurses and the staff. The first advice to the doctor is don't build. You can succeed if you are efficient but the burden is enormous. The doctor with a private hospital must be a business man as well. Civil and religious organizations should build the hospitals except in those rare cases when the staff can get together and own the hospital. This is the best plan of all. The advantage of complete staff control is immense and the number of doctors involved insures patronage. Even on this plan it is right to ask for contributions because a hospital never pays a dividend and contributions bring with them the support of the town. In building a small hospital it is not always safe to take advice. The ordinary architect gives advice fit for the large hospital only. In your plan follow standard lines. Don't indulge in any cherished fancies of your own or of a favorite nurse. Build for utility, the maximum number of comfortable rooms for the price. One doctor in correspondence sent a picture of his twelve bed hospital. The large artistic columns re-

mind one of the Acropolis at Athens. Another ambitious promoter would make most of the outside walls of glass. In the equipment don't buy too fast. Beware of the representative from the big company who sells to large hospitals and is so much pleased with yours. Many small hospitals have more equipment in storage than in use. Buy in harmony with size of your building. A ten bed hospital does not need a \$4000 X-ray. The two standard magazines, Hospital Management and Modern Hospital, contain ample plans and instructions for building the small hospital and the hospital committee of the American Hospital Association should be very useful and so far as I know its advice is free.

The present plan of a nurses' training school is about as undetermined and diversified as the plan of salvation. We need standardization, standard entrance requirements, standard time, standard curriculum and above all standardized superintendents. The state should control the education of nurses and unite the other educational forces with those of the small hospital. Then local jealousies could be ignored and one full time teacher on each subject could supply a number of hospitals in the same town or vicinity. Every state university should train superintendents. The shortage of pupils is due of course to the high salaries outside. The quality of the matriculant is low now too. We cannot take the common domestic and make a scientific nurse of her. She lacks responsibility as well as education. We need the best class of high school girls. If girls and their mothers knew the great and lasting educational value of the training course we would not lack support. The training course is worth more than the college course if the girl never earns a week's salary. And more than this, it gives as particular development to womanhood. It brings out as no other occupation can the sympathy and devotion of the feminine character. We are all familiar with the broad shoulders and elastic gait and general exuberant manliness of the soldier. What military training is

to a man, nurse's training is to a woman. The mark never leaves her. Those of us who have met the trained nurse at the head of the household can realize the competent matron and perfect mother.

At the meeting of the Kansas Hospital Association in October the slogan is to be "Universal Nurses Training." It is hoped to organize a committee composed of one member from the Kansas Medical Society, one from the Kansas High Schools, one from the Nurses' Registration Board and one from the Kansas Hospital Association. We want to promulgate a plan for a training course of three years, the first year elective in the last year of high school and the last two years in the hospital. The high school professors can give the girls theoretical education and inspire them with the ideals of their calling in a way that a small hospital cannot. They should of course continue the lectures and laboratory teaching throughout the last two years. The small hospital cannot afford laboratories. Of course to hold this class of girls we must make some radical changes. We must hire ward assistants and relieve the girls of drudgery. We must organize regular courses with systematic hours of instruction. We must have competent and refined superintendents. We must have comfortable quarters, reception rooms and other provisions for entertainment. This plan may sound visionary but the public is ready for it. Educational people respond enthusiastically to any movement for the public good. The hardest support to get is from the doctors. When the doctor starts a movement every other doctor is inspired with a saintly consecration to stop it. This is both sinful and inexpedient. One doctor's reputation helps every other doctor. The prosperity of one doctor or one hospital does not come from another doctor or another hospital but from the irregular and the undertaker.

Lastly, we come to the most important item of all, the staff: If two doctors study a case together they learn three or four times as much as one and as specialist after

specialist is added to the team the advantage to the patient is multiplied in geometrical proportion. Of course, every small hospital cannot have a complete staff but the defect can be supplied by visiting specialists from larger hospitals. A neurologist, for instance, can do his part by a visit every week or two. The hospital staff will accomplish two important things for us. It will demonstrate the efficiency of scientific medicine and purify our practice. Replacing haphazard individualism by accurate group diagnosis will show a proportion of cures which most men would not believe possible now. This applies to most large hospitals as well as small ones. Actual unrestricted consultation for the good of the patient only is rare everywhere. One man dominates or calls consultation to support a previous opinion. Under this careful scrutiny of the staff the unnecessary operation will disappear automatically. In groups men are respectable. Abortion is out of the question with a staff as well as the sister crime of sterilization. We cannot imagine a consultation in which each man gravely contributes the opinion that the lady has enough children and should have her Fallopian tubes resected. The diagnosis of "Hyperfecundity would not look well on a College of Surgeons chart with a microscopic report of the specimens removed". Ovaries enlarged to the size of the first digit, the left having a cyst the dimensions of a lima bean." We do not generally realize the hold this stealthy crime is getting on the profession. It is so easy to satisfy one's conscience with fabricated or hysterical symptoms and pare away the pedicle of the ovary or snip a normal scarlet tube. There is no epithet in our language to express the depravity of the surgeon who prostitutes his talent to such a purpose. One would need a moral microtome to separate him from the frank abortionist. If there is a difference it is in favor of the latter. He takes the life of an individual only and may sometimes claim the extenuation of sympathy while the ovarietomist and tube snipper slaughter

a whole family deliberately and in cold blood.

Two obstacles mainly stand in the way of staff organization; the jealousy of the profession and the distribution of the fee. The first obstacle evaporates immediately when the doctors are brought together. Professional aloofness is not ill will but distrust only. As soon as each man learns that the other does not want to injure him but is only afraid of being injured they are the most congenial friends. It is a sad fact that there are hardworking honest doctors that spend their lives without a single professional confidant. The second obstacle is fundamental and in spite of the efforts of disinterested leaders is maintaining stasis in medical progress. Coming down to us through such men as Meade and Garth and Arbuthnot, who were admitted on equal terms to the society of the nobility, we have the notion of professionalism. The doctor could not condescend to collect his fees. Some of our American brethren have been rich enough to perpetuate this monumental vanity. Some of the poorest doctors we know boast of practice without pay. On this account largely the distribution of medical fees has never been placed upon a sound commercial basis. Two recent occurrences have impressed me with two opposite ways of dealing with this problem. An outside surgeon brought cases to a private hospital and employed the nurse superintendent to assist him. The crisis came when he hurried in with a patient for an "Immediate Prostatectomy." One of the proprietors of the hospital requested an interview and offered his services as assistant. The surgeon was pleased to accept but demanded to know beforehand the amount of his assistants' charge. In the negotiations that followed a general agreement was reached by which the hospital proprietors were to be called in consultation in every case brought in by the outside surgeon and were to collect from the patient beside the hospital bill one-fourth of the fees and the surgeon three-fourths. The second occurrence was when a physi-

cian found it necessary to recommend an operation in a family for which he had long been the trusted attendant. He told the father of the patient that he would go with them to a celebrated surgeons' clinic without charge because he was so much interested in the girl and because he liked to see the surgeon operate. He went, put on a white gown and stood by at the operation. Immediately afterward, he slipped off the gown and caught the next train for home, but he carried with him neatly folded in his inside pocket the check of his old patron made to the surgeon for \$150 but for which he paid the surgeon only \$75.

Now what connection have these two instances with the hospital staff. Only this, the first instance is the beginning of a staff and the second one is the end of it. The fee splitting surgeon cannot join a staff. The subordinate partner in the transaction will not submit the fate of his commission to the doubtful decision of a team. The surgeon he supports must operate with mathematical certainty. The immediate result of the first instance was team work and the old man with acute retention of urine got the benefit of it. His operation was in two stages instead of one. The later result is that the outside surgeon and the two hospital proprietors are working together with great advantage to all. Around this nucleus it is hoped to build up a complete staff.

And now ladies and gentlemen, scientific candor impels me to disclose to you the wretchedest detail of all. The great surgeon who sold the check to the family doctor for 50 per cent of its value was a member of the College. To the small beleaguered army that had held out against fee splitting in the state of Kansas the organization of the College of Surgeons came as we thought like a relief to Lucknow. Now we could drop our tattered banner into powerful hands and seated safely on the brow of a neighboring hill watch the course of victory. Now our competitors must meet us on an equal commercial basis. Now we could have success with honor. So it was

with the keenest anticipation that we awaited the assemblage of the next state meeting. Then we would delight our souls with the flash of the flint and steel of oratory on a subject so near our hearts and for which we had made such enormous sacrifice. But the campaign has never come. Meeting after meeting has passed and it has never been our pleasure to hear a member of the College make the most distant allusion to this evil. Once in a meeting graced by prominent members we made bold to throw out a challenge for discussion, but the silence was complete and crushing. Occasionally we have plucked a distinguished man aside and in the strictest confidence begged a report of the progress of this propaganda, but in every case we have found ourselves in the presence of a dignified reserve compared to which the Sphinx's time honored reticence is a cordial tete-a-tete. Now after all the fanfare of its organization and all the explicitness of its declaration is this great College of Surgeons subject to the oft-repeated charge of insincerity. Has it like the King of France with forty thousand men marched up the hill and then marched down again? Or has it fought and lost? Has all the proud chivalry of American Surgery charged the embattled stronghold of the Secret Division and gone down beneath defeat? This we know at least that the two basic propaganda of the Colleges' organization are inseparable. While secret division obtains, Staff Organization is a farce. The Hospital Staff is a partnership into which the public too must be admitted and this partnership must be established on an equitable business basis.

I bring this distasteful subject before you only under the pressure of necessity and at the greatest personal sacrifice. I am a candidate for the College. A membership is the crowning glory of a well spent professional life, but our mouths must not be stopped. We cannot dodge the chief issue. We must drag forth from the closet of the profession this musty old skeleton of secret division and crumble it in the light of a universal publicity. We must

remove every obstacle to the progress of the greatest movement in all the history of medicine—the organization of the hospital staff.

R

A Case of Primary Carcinoma of the Liver with Cirrhosis

BY HUGH A. GESTRING, ST. LUKE'S HOSPITAL,
KANSAS CITY, MO.

While primary epithelial tumors of the liver are uncommon yet many cases have been described and the subject becomes more interesting as the number of reported cases increases. The clinical picture, the pathological picture, and the apparent etiology of these cases differ markedly. They usually claim as their victims, men and women between the ages of forty and sixty, but they are not unknown in children. Aeland and Dudgeon (1) have collected nine cases occurring in children between the ages of one and sixteen years. As regards sex Eggle finds in the cases he collected of adults that 63.3% were males and 36.7% females. With children the largest percentage of primary carcinoma of the liver is among the females.

These tumors may arise from the liver cells or the smaller bile ducts, and according to most observers are more commonly derived from the liver cells; eighty percent originating from the liver cells and only twenty percent from the bile ducts. It is not always easy to differentiate a carcinoma derived from the liver cells from a carcinoma of bile duct origin, and this difficulty is easily understood when we recall that in regeneration liver cells are apparently formed from bile ducts. The cells of a liver cell carcinoma resemble very closely the cells of normal liver, but they are much larger and polygonal in shape. They may have one or many nuclei and mitoses are common. The nucleus is usually larger and darker than in the normal liver cell, while the protoplasm although slightly granular is usually clearer than in the normal liver cell. The cells of this type of cancer form tubercular-like structures. The bile duct cancer forms a tubulo-adeno-

matous structure, tending to conform to the structure of the tissue from which it arises. The cells are usually cuboidal or cylindrical with a clear protoplasm, and are quite uniform in shape and size.

Both types may be associated with cirrhosis, but the liver cell carcinoma the more often, as it is associated with cirrhosis in about seventy-five per cent of the cases, while the bile duct carcinoma is associated with cirrhosis in about fifty per cent of the cases.

Primary carcinoma of the liver is rare. In 11,500 cases at Guy's Hospital, Hale White (2) found eleven cases, or .1%. Virchow (3) reported five cases among 6,000 or about the same percentage. Other observers found a smaller number, the percentage being as low as .028 or .03 per cent (4).

Primary carcinoma of the liver has been classified according to gross appearance and the following types distinguished.

1. Cancer massive: In this type there is a single large tumor present which however may have a few nodules outside the margin of the main tumor. The largest nodule usually has replaced almost the entire tissue of the liver. This group includes about twenty percent of the cases of primary carcinoma of the liver. (Eggle).

2. Diffuse carcinoma: In this form the growth is diffuse and the point of origin of the tumor is not definite. The liver is infiltrated by a new growth, and there is also an increase in connective tissue. Microscopically the cells in this form of carcinoma are usually of the spheroidal type. This occurs in only a small per cent of the cases and is perhaps the rarest of the primary carcinomas of the liver.

3. Nodular or multiple primary carcinoma: This resembles closely carcinomata that are secondary growths, although here of course there is no primary focus. A thorough examination of the body, to eliminate the possibility of there being a primary growth in other parts, is needed to substantiate the diagnosis of this type. This form is frequently mistaken for multiple adenomata

with cirrhosis, and is probably the most common, occurring in about sixty-five per cent of cases.

4. Carcinoma with cirrhosis: The external appearance is that of a hobnailed liver, and the liver as a whole may be diminished in size, but it is usually larger and at times enormous as in the case reported by Aeland and Dudgeon (l. c.) where from a fifteen year old boy the liver weighed sixteen pounds.

Of the types of primary liver carcinoma, the one just described, although quite frequent, is often accompanied by a pathological picture which makes it quite interesting.

A case of this kind is that of a white man, farmer, aged sixty-three, who was admitted to the Bell Memorial Hospital, University of Kansas, on May 14, 1917 and died May 23, 1917, and which was handed to me by Dr. Ralph H. Major, who kindly assisted me in the study and to whom I acknowledge my gratitude.

Past history showed patient to be troubled with constipation and pain in the region of the kidney for many years. In 1914 he had pneumonia followed by digestive disturbances. In 1916 or nine months before death he had sciatic rheumatism which lasted until within two months of his death. His present history showed him to be complaining chiefly of pain on right side in the region of the gall bladder. These sharp knife like pains on the right side started four weeks before death. The pain seemed to radiate to the back, and was not accompanied by nausea or vomiting but usually with headache. He had no trouble with indigestion or pain until three months before death.

The physical examination showed the patient to be jaundiced and having oedema of the feet, the deeps and patella reflexes gone, while Babinski's sign was positive. The abdomen was slightly distended and there was a tenderness throughout. The patient was sensitive to very slight pressure just below the right rib margin, and also upon percussion of the right side of the

thorax in the back and in the region of the kidneys more marked on the right side. Two days before death the patient complained of pain in the ergion of the lungs which was more marked on the right side. Prune juice sputum appeared on May 21, and bronchial breathing indicating lobar pneumonia. The patient was delirious the last day.

The temperature was irregular varying between 99 and 103 degrees. The white blood count showed about 17,000. The Wassermann test was positive, three plus.

Patient died May 23, 1917 and the autopsy was performed by Dr. Ralph H. Major eight hours after death.

Necropsy. The body was that of an old, emaciated man, skin somewhat jaundiced. On opening the abdomen a large amount of blood stained fluid was seen; when the pericardium was opened, a healed pericarditis was noted with an excess of fluid in the pericardial sac. The entire lower right lobe of lung was consolidated. The kidney had large irregular scars on the surface and the aorta showed numerous plaques of sclerosis and jaundice. The spleen had deep irregular pitting on the surface and on cut section was dark red in color.

The liver was very much enlarged weighing 2450 grams. The surface was irregular, and presented numerous nodules varying in size from one half to four centimeters in diameter. The color was greyish with darker reddish liver substance surrounding them. Between the prominences the surface was only slightly irregular. The capsule over the right lobe was somewhat thickened and greyish in color. The upper part of the right lobe just under the dome of the diaphragm contains a large irregular scar. Although most of the nodules are small measuring one centimeter in diameter some are quite large and measure four or five centimeters in diameter. There are three or four very soft bosses. On cross section the liver tissue is heavily studded with tumor nodules and the lower portion of the right lobe is almost entirely converted into tumor

masses. Numerous strands of fibrous tissue form a network throughout the right lobe while the posterior two-thirds of the lobe is a soft spongy tumor mass. In the center of the lobe is one large solid like mass measuring about four centimeters in diameter and of a grayish yellow hue. There is a large thrombus in the portal vein which is apparently tumor tissue. The anterior portion of the lobe although nodular is much firmer and has a greenish tinge and the fibrous strands stand out quite prominently in this portion. The liver tissue itself has not been so thoroughly destroyed in this region as yet.

The following anatomical diagnosis was made: Lobar pneumonia of right and left lower lobe; cirrhosis of liver; carcinoma of liver; arterio-sclerosis; pericarditis (healed) perisplenitis (healed); ulcer of colon (healed).

Microscopic examination of the liver: The capsule and perilobular connection tissue shows a marked hyperplasia with infiltration of lymphocytes. The nodules are loosely arranged being separated by intervening clear spaces. Different sections taken from different portions of the liver show variations in the microscopic picture. There is very little normal hepatic tissue in the right lobe and it is in small patches that are encapsulated by fibrous tissue. There is much extravasation of blood in the liver tissue, and in many of the lobules the liver cells show hypertrophy and some contain more than one nucleus. The nuclei stain heavily, are oval in shape, and many of them are enlarged. The nucleus is much larger than in a normal liver cell and may be clear, containing nothing but chromatin and the nucleolus or perhaps several nucleoli. In some of the large tumor cells, the nuclei are grouped in rosette formation. Others of the tumor cells show necrosis or vacuoles intervening in the protoplasm. The protoplasm is granular or quite clear and stains purple with haematoxylin and eosin. Mitotic figures are rarely seen. The large cells are frequently grouped in masses with an acinar arrangement. Many of the tumor

cells are bile stained as also are some of the liver cells.

Many of the liver cells show extensive necrosis with the formation of numerous vacuoles and there is much interlobular connective tissue formation in which there are many young sprouting bile ducts. Other sections of the tissue are almost entirely cirrhotic and show much connective tissue with numerous hemorrhages in regions of the vessels.

Some sections present small scattered nodules of tumor cells, many of them showing necrosis. The small nodules showed variation in size, some being quite large others consisting of only a few cells. The tumor cells are much larger than the normal liver cells and polygonal in shape.

Metastases: Masses of tumor cells were found occluding and forming thrombi in the portal and hepatic veins and one large thrombus composed of tumor cells was found in the hepatic artery. Some of the blood vessels were entirely occluded and in some of the larger ones as many as two or three groups of tumor cells were seen attached to the wall or loose in the lumen. Some of the vessels of the lung showed thrombi, composed largely of tumor cells, which however stain poorly, show many vacuoles and are unquestionably necrotic. There were no living tumor cell metastases in the lung and no tumor cell metastases were found in other organs or parts of the body.

A brief survey of a few similar reported cases shows that they differ widely in their clinical and pathological aspects.

The temperature in primary carcinoma of the liver is usually elevated but this is no hard and fast rule, in some the temperature runs as high as 104 or 105 degrees, while in others it is subnormal 96 or 97 degrees. In the majority of reported cases, the fever seems to range from 100 to 102 degrees. Dr. Pye-Smith (5) reported one case in which the temperature reached 107 degrees, and H. T. Karsner (6) reported two cases in which the average temperature was 97 degrees.

Ascites, while it is a common occurrence is often lacking. The amount of fluid varies from a few centimeters to four or five liters. Paracentesis is often repeatedly performed on a single patient. The ascitic fluid may be clear and yellowish altho at times it is blood stained.

Jaundice is quite common but may be absent. Often it does not appear until in the most advanced stages of the disease. The course of primary carcinoma of the liver is very brief. It is much more rapid than is that of secondary carcinoma of the liver. The average length of time after the clinical symptoms begin to appear in about three months, when it runs longer than five or six months, it is usually considered as a secondary carcinoma of the liver. However, a case is reported by H. T. Karsner (6) in which the disease ran eleven months, and one by Dr. Pye-Smith (5) which lasted seventeen months.

The etiology of primary carcinoma of the liver is not clear although many theories have been advanced. Alcohol, because of its supposed relation to cirrhosis of the liver, is considered an important factor. Syphilis and malaria are also mentioned as possible etiological agents. Some authors believe that cirrhosis and adenoma formation are quite independent of each other; others think that the adenomatous growth is the primary disturbance, while the cirrhosis is secondary. Another view more commonly held, is that the cirrhosis is the primary disturbance while the adenomatous growth is a secondary development.

According to this view the liver cells, bile ducts and connective tissue are stimulated and participate in repair after injury, as a result of injury there is destruction of liver tissue and this is followed by necrosis. Fibrosis and regeneration set in and cause the production of hyperplastic nodules of liver cells and many new bile ducts, a picture common in any cirrhotic liver. This may be called adenoma with cirrhosis. Further injury causes further necrosis and regeneration, cells lose their function and

pass thru a proliferation exceeding their goal and form tumor cells.

Liver cells have a greater proliferative capacity and are more often stimulated to vegetative growths of cancer formation.

Adler (7) finds that the normal liver cells in a child are paler while those of adults are darker and more granular. In studying the embryology of normal liver cells, we find that the normal liver cells in the embryo have a large nucleus, larger than that of a normal liver cell of an adult, and that the protoplasm of the liver cell of the embryo is less than that of a normal adult liver cell. The nucleo-protoplasmic ratio is much greater in the embryo than in the adult. In comparison, we find that the nucleo-protoplasmic ratio of the carcinoma liver cell is greater than that of the normal liver cell of an adult and is more closely related in this respect to the liver cell of the embryo. Wegelin (8) suggests somewhat the same change in carcinoma as the small nodules resemble the liver cells of children and the larger older nodules the liver cells of adults. The younger nodules especially show this feature.

The clinical picture is that of advanced cirrhosis and the diagnosis is often established only at autopsy.

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R

Surgical Treatment of Empyema

BY JOHN E. WATTENBERG, M. D., ITHACA, N. Y.

The treatment of infected wounds has perhaps received more attention in the last two or three years, than in a decade of years previously. Surgical conditions which

yielded readily to recognized procedure, and in which as a consequence there was little tendency toward chronicity, have not been dealt with so extensively in the literature of recent years. The infectious conditions of more or less fixed cavities however, as for example are encountered in infected bones and also the thoracic cavity, have gone through a great many stages of surgical technic, and a still greater variety of postoperative treatment. Empyema of the thorax has produced its share of chronic patients. It is readily gleaned from the literature that methods for the treatment of this condition are becoming more and more standardized. Whereas writers on this subject even a year or so ago differed widely as to the safe attitude in the case of an empyema at the time when accumulations are first present in the pleural cavity, if one may judge by the current periodicals, no one now attempts to evacuate by a major surgical procedure newly accumulated fluid in the thorax, whether a pneumonic process is still present or not. Also, one does not see today, the terribly deformed and mutilated chests of patients, as even a few years ago were inserted into the best recognized texts and Systems of Surgery where they were exhibited as "completed cures."

When the physical signs point to accumulations in the pleural cavity, there is not merely no objection to aspiration of the chest, but it should be considered one of the most important steps in the treatment of these patients at this time.

If fluid is present it is important to know it. Further, it is of greatest importance in the treatment to know the character of the fluid present. Depending upon the stage of the disease and the character of the fluid present, aspiration may or may not need to be repeated. Certainly, in the presence of thin watery exudate, regardless of the nature of the organisms present, one would not undertake to open the chest. If to this are added signs of embarrassed breathing or circulation, evidenced by dyspnoea, and perhaps even cyanosis and rapid pulse, par-

ticularly common in certain stages of pneumonia, repeated aspiration is indicated and anything more formidable than this is certainly contraindicated. The vast experience with acute empyema patients, which the profession has recently gone through, has shown obviously that the mortality is frightfully high in acute cases that are operated too early. Stone, et al. reported in the Archives of Internal Medicine, October 1918, that among 119 cases of empyema, operated at Ft. Riley, Kansas, the mortality in those operated without aspiration was 63.8 per cent, while in those operated after several aspiration, the mortality was only 22.2 per cent. The Empyema Commission which made its report in the Journal of the American Medical Association, August 3 and 7, 1918, warned against early operation. The cause of death in the cases operated early and without aspiration has received varied consideration. In cases where the pneumonia has not as yet subsided, the added burden of an operation is frequently more than can be successfully combatted by the resistance of the patient. The Empyema Commission mentioned the opening of raw surfaces with consequent blood stream infection, as a probable cause, but felt that the mere mechanical relief of compression of the laboring lung might be a factor. Rodman is inclined to credit the latter view. He believes that the exudate present in these cases has a physiological function to perform, namely that of "splinting" the infected lung. With ordinary care there should be no objection to aspiration. If the patient is highly sensitive or is required to undergo the relatively slight amount of discomfort incident to aspiration very frequently a small amount of local anaesthesia can be used. When the aspiration is carefully done there are practically no chances of bad after effects such as are described by some writers. Repeated aspirations until there is frank pus, and until the exudate has had an opportunity to wall itself off, and the pyothorax thus afforded an opportunity to grow as small as possible, make the patient's chances better by a very large

percent. What it is necessary to accomplish in this early stage, is to relieve the embarrassed respiration and circulation, and perhaps by diminishing the amount of toxic substance present, actually lessen the amount of absorption of toxic substance into the blood stream. It is better to aspirate a week longer than necessary than to take chances by operating a few days too soon.

In operating, two main points should be kept in mind. Evacuation of the exudate, now turned into pus, is one thing. This is however not the only important point. One must make subsequent treatment possible. The latter can be accomplished only by making an opening of proper size and then by **keeping it open** until the cavity is either sterilized or until it is obliterated. In the majority of instances, operation at a point in the posterior axillary line, at about the level of the eighth rib will answer the purpose. Whether this will suffice or not of course will have been determined by previous aspirations. Whether one or more than one rib will need to be resected, depends upon the size of opening the removal of a part of one rib will make. The opening in order to permit of later treatment should be from two to three inches in diameter. A point of importance is not to close this opening by any suture. The only sutures employed, should be used to ligate bleeding points, encountered during the operation. The skin should not be closed. An attempt should be made, beginning with the dressing on the operating table, to keep the wound open. This can be accomplished by introducing several large tubes with gauze packed into the wound, and around them. These tubes should be of sufficient length to reach through the chest wall only. This is long enough to accomplish their purpose and besides to have them longer may cause interference with the expanding lung.

In the present day of advancement in antisepsics, no one should feel content merely to open an empyema cavity and let it drain. Occasionally in the literature one may see where a writer decries the principle of antiseptic treatment for thoracic empyema. These

same men often expound at length on the proper disposition of **pus** in these cases Dr. Carrel a long time ago made a statement to the effect that pus had been abandoned at his hospital. Dr. Carrel's work in antisepsis is of course very well known. In the treatment of so great a number of infected wounds as the war for instance brought on us, there are naturally evolved a great many different methods of sterilization. This number grows greater by virtue of the fact that so many different men worked more or less independently on similar conditions. As a consequence then, there have been brought to our attention, by the writers of many excellent articles on this subject, many different kinds of antiseptics. Doubtless the success of the antiseptic employed has always depended to a very great extent on the persistent vigilance with which it was applied. It is certain that much good can be found in the literature about all of them. However the chlorine antiseptics have probably stood the test better than any other, particularly in empyema cases. Empyema cavities usually are lined with more or less exudate even before the disease has become chronic. Hence there is present a good deal of bacterial or tissue protein, upon which Dakin's solution exerts its proteolytic action. This action the chloramines do not have. They serve merely as germicidal agents and thus should be used where germicidal action only is desired. Lee, (Ann. of Surg., June 1920, p. 772).

A soon as the chest has been opened an attempt should be made to bring the lung out to its full expansion again. This can usually be done by using the ordinary Wolfe bottles, but they must be used persistently, beginning immediately after operation. Needless to say a great deal more can be accomplished early than later when the exudate covering the pleura may have grown more fibrous. The latter it will do unless an antiseptic is employed which exerts a solvent action on the "reacting substance."

A safe plan to follow in acute empyema

is to aspirate the chest for diagnostic purposes, at first, but for its therapeutic effect when later repeated, this to be followed by rib resection. When the time arrives that one can safely operate, it should be remembered to make a liberal opening leaving the latter open wide, so as to make subsequent treatment by way of sterilization possible.

The principle of treatment in the chronic cases is much the same as in the acute ones. However, when in the chronic cases the wounds are practically closed externally as they so frequently are in neglected cases, reoperation may have to be resorted to in order to make an opening which will make treatment of the cavity possible. Frequently at secondary operations, there is present an enormously thickened pleura. A liberal opening must be made through this by excision of this tissue. If acute empyema receives proper treatment, there should be very few instances of chronic empyema. The X-Ray and fluoroscope are practically indispensable aids in the intelligent observation of the progress of an empyema cavity. Proper hygiene, including plenty of wholesome food and corrective gymnastics, cannot be overemphasized.

R

A Million Dollar Proposition.

BY CHARLES H. LERRIGO, M. D., STATE REGISTRAR

We took a day to visit the doctors of a representative Kansas County last month. The registrar and assistant registrar made the trip together, driving 105 miles according to the speedometer. We saw every doctor in the county excepting a few who were out on calls and one who was taking a vacation. It was rather striking that only one doctor in the whole county, in the month of August, was taking a vacation.

Are Kansas doctors interested in reporting the births they attend? We'll say they are. We only found one case of willful neglect, and the classification is hardly fair even in that case. The doctor simply got started wrong and the further he went astray the harder it was to get back. He was

quite willing to be guided into the straight, if not narrow, path that reputable Kansas doctors tread, and is now once more a member of the order in good standing. So the county is now one hundred per cent.

We were very much interested in hearing that the doctors had to say about births. Obstetrical practice is a thing that does not vary greatly in Kansas, yet the doctors mostly opined that there had been fewer babies born lately than customary.

This is true enough of 1919 but statistics tell us a different story for 1920. For the seven months of 1919, January to July, inclusive, there were only 19,836 babies born in Kansas. But in the same period of 1920 there were 22,136, an increase of 2300. If carried out in the same proportion for twelve months, the increase in babies born over 1919 will be nearly 4,000, which is about ten per cent of our annual number of births.

In a normal year Kansas has nearly 40,000 babies born, exclusive of still births. If the doctors received just a fair rate of compensation, averaging \$25.00 per birth, they would get a million dollars. But we found by our tour through the county that a lot of doctors are still taking confinement cases at \$10.00.

The great objection is that it is not fair to the patient. Hold on a minute, you say. You mean not fair to the doctor, don't you? No, I mean not fair to the patient. The doctor who attends a case of confinement for \$10.00 can't be fair to the patient unless he is an oil well king to whom money is no object. He cannot give preliminary examinations, urinalyses, actual attendance during confinement, after visits and a final examination to make sure that all necessary repair has been made and the mother is in good condition, for any such fee as ten dollars. A patient may think herself lucky to get off with a ten dollar fee but you know how lucky she is if she has to bear the annoyance of a prolapsed bladder all the rest of her life.

We didn't ask the doctors about these things. They just told us. They discussed other things, too, that were not million dollar propositions at all. One man thought that the doctors ought to have a twenty-five cent fee for making reports. So we asked several what they thought. "Wouldn't bother with it," said one. "I consider that certificate of birth to be part of my service to the family. I get \$25.00 for most cases of confinement and never less than \$15.00 and I make out that certificate of birth as part of my duty to that baby."

That was the opinion generally. The service is for the benefit of the family. It is one of the many important things that the doctor does in giving obstetrical service, things that cannot be enumerated but go to make up the total of service rendered, all of which should be included in one fair fee.

Most of the doctors understood that the local registrar's interest, on the other hand, is represented solely by the twenty-five cent fee, and that it is his pay for recording the certificate, checking its completeness, conducting any correspondence and forwarding to this office.

Incidentally we were obliged to call on a few mothers whose babies had been overlooked in the important matter of registration. We discovered that mothers are now alive to the great value of birth registration. We loyally tried to make excuses for the failure of their doctors and they loyally accepted them for the most part. But they were far from pleased and one mother was very positive that if she had been able to get the doctor she wanted, her baby would never have suffered such neglect.

We found just one parent who didn't care. Was it merely a coincidence that he was the male of the species? He said "Doc" had made him a reduction of \$5.00 on the case and the kid could look after his own registration if he was particular about it. You have all men that kind of a father. How many of you care to have his family practice? Question 2: How much did he ever pay the doctor?

BELL MEMORIAL HOSPITAL CLINICS**The Clinic of Dr. A. L. Skoog, Neurological Department****SPINAL CORD TRAUMA**

The presentation of this patient is prompted by the fact that for a number of months we have had under observation and treatment on the wards at Bell Memorial Hospital an unusually instructive case. The subject is of much importance to the doctor who sees emergency cases.

Case X.

Male, age 31, married (wife in Austria), farmer.

Chief Complaint.—Paralysis both legs, with pain in back and legs.

Previous History.—Nothing significant.

Present Illness.—November 6, 1918, the patient was thrown from his horse, which then stepped on the middle of his back, and broke his left collar bone. He felt no pain, but was unable to rise, and lay in the pasture from 11 a. m. until 8 p. m., when he was found. He was unconscious at no time. He could roll on the ground and move his legs but could not stand. Below the knees his legs felt as if asleep, but above the knee the feeling seemed as usual. He reached the hospital about 8 p. m., and from this time had very severe pains extending from both knees to neck. His legs were "cold as ice" and he could not pass urine or feces voluntarily for five weeks.

Five days after the injury the spine was operated upon. Two days later the pain stopped. Five weeks after the operation he began to lose all feeling, gradually from feet upward, extending to three inches above navel.

After nine months, (August 1919) sensation began to return gradually from above downward, in the following order: abdomen, front of thighs, back of thighs, legs below knee. Sensation in legs is not yet distinct. It is a tingling feeling rather than a distinct sensation of touch. He is able to feel his feet touch the floor. He complains that sensation is entirely absent (August

1920) in a circle of several inches about the anus, including the scrotum and penis. He "cannot feel urine start, but feels it run and stop." As sensation commenced to return (August 1919) pain also began again. For two or three months it was sharp, from the waist down and continuous day and night. At present the pain is not constant, but comes especially on cold days. It feels like "sticking knives in the legs."

In Feb. 1920, he had cystitis, but recovered from this in a few weeks. Dr. T. G. Orr was consulted at the time.

Physical Examination.—The patient is in a fairly well nourished condition. He lies in bed, with both legs entirely flaccid, though he can turn himself over and swing his legs about from the pelvis. There are several scars of healed decubitus ulcers on sacrum and heels. He passes urine and feces involuntarily. There is a scar of an operative incision in mid-line of back from seventh dorsal to second lumbar spines. The spinous process of the eleventh dorsal vertebra is prominent and there is a bony defect corresponding to the tenth, ninth and eighth spinous processes.

Cranial nerves, including pupillary reactions, are normal.

Tendon reflexes: Supinator, biceps and triceps, of normal intensity and equal on the two sides. Knee jerks absent, Achilles tendon jerks present. Sustained ankle clonus on both sides.

Superficial reflexes: Abdominal absent, except right upper quadrant. Cremasteric absent. Plantar, extensor type on both sides.

Sensation: Touching hairs, light skin touch and deep pressure are felt normally above a line passing through root of penis and about two inches above anus. In the area including the penis, scrotum, and the perineum, two inches behind and to the left of the anus and one inch to the right there is no perception of light touch. Deep pressure is felt over this area.

Perception of light touch and deep pressure over both thighs, normal.

Right leg: Touch on hairs not felt below

knee. Light touch on skin diminished below knee and absent outside of right foot from heel forward. Sensation on deep pressure diminished on inside of right leg.

Left leg: Touch on hairs not perceived. Light touch is felt only over a triangular area down inside of leg, extending within six inches of ankle. Sensation on deep pressure absent on outside of left leg and diminished elsewhere below knee.

A rachiocentesis at the third lumbar space showed a free communication of the spinal fluid above and below the traumatic area. An X-Ray examination revealed no irritation or pressure upon the cord from any abnormal bony processes.

During a period of eight months while treated in the hospital there has been a general improvement, and also some increase of power in each leg.

Before a final review of our case I wish to call attention to a few salient anatomical facts which particularly appertain to the material under consideration. We have involved the vertebral ligaments, cartilages, muscles, meninges, nerve roots, intervertebral ganglia and the spinal cord. In importance to the patient the spinal cord commands first attention.

The spinal cord is a delicate portion of the central nervous system, suspended within a large canal and extending from the foramen magnum to the upper border of the second magnum vertebra. Like the brain it is surrounded by three coverings, namely, dura, arachnoid and pia. The sub-arachnoid space contains a goodly quantity of spinal fluid. Between the dura and the bony wall of the vertebrae is found a considerable quantity of fat. I wish to emphasize that the cord does not merely completely fill up the entire spinal canal, that there is a considerable amount of space intervening between the external surface of the cord and the inner bony wall filled with spinal fluid, meninges and mesoblastic tissues. This is of considerable importance when considering the amount of displacement of the vertebrae or bony fragmentation before damage to the cord may result.

In order to appreciate the pathology of traumas to the spinal cord and to make reasonably accurate diagnoses, it is necessary to have a fairly comprehensive knowledge of the minute anatomy of the spinal cord, to know its segmentations and their distribution, the various tracts and their functions, and localizations in the gray substance. We should also fully appreciate that these delicate neuronal tissues will permit of only a moderately small amount of injury from which repair can take place. Thus neurones damaged to a certain extent may recover. If much damage is done or complete section taken place we can never hope for a recovery. The higher the lesion in the spinal cord, the greater is the mortality rate. Most of the deaths result from conditions which follow trophic disturbances, as cystitis, nephritis or infections from decubitus.

Fractures or dislocations of the vertebrae may result from direct or indirect trauma, the former being the most frequent. Fractures of the laminae and transverse processes are most likely to cause damage to the underlying cord. The bodies may also be broken or dislocated. A fracture of the spinous processes is not expected to injure the cord. Dislocations may occur without an accompanying fracture. It is possible for a dislocation to be of such a severe degree as to completely sever or crush the cord and yet at an operation or autopsy not be found. The parts dislocated may spring back into their normal positions very quickly.

It is possible to have damage to the spinal cord without fractures or dislocations. A hematomyelia, or small hemorrhages scattered through the cord substance may result. But usually they do not cover any great longitudinal distance. I merely wish to mention possible contusions, which will not be discussed in detail here.

Spicules of bone may project inward and press upon the spinal cord even though there is no external evidence of a fracture. The X-Ray will of course materially aid in discovering such a state.

It is extremely important to make as early and accurate a neurological diagnosis as possible. It is essential to do this in order to make a prognosis, and to determine whether to operate or not within the first two to four days. I believe if we are going to decide upon any operative interventions we should do so before any serious degeneration in the cord has taken place as a result of compression from fractures or bony spicules, hemorrhages pressing upon the organ, or edema of the structures of the cord itself.

In the examination it is most important to record carefully the qualitative and quantitative alterations, studying the epiceritic, protopathic and deep sensibility. The true metamericism of the cord permits of most accurate results from these studies. A study of the motor changes and paralyses, and reflex states is also of some value as far as the localizing diagnosis is concerned. A consideration of the urinary and rectal functions is imperative. Spasticities and muscular atrophies occur at a later date. Trophic alterations will be evident at once. Later these may be indicated by blebs or decubitus. Pain, if present, may be referred to a level immediately above that of the injured area, or, may be caused by irritations to nerve roots or intervertebral ganglia.

CONCLUSIONS

In an analysis of this case we readily conclude that the cord was not severed. However, it was considerably damaged by a fracture or fracture-dislocation. The history would indicate that the trauma involved the spinal cord at least as high as the eighth dorsal cord segment. Possibly the seventh metamere also was involved. Whether there were any bony spicules or hemorrhages compressing the cord can not be ascertained positively at this time. We are inclined to think that it was due to a compression from remorrhage rather than any bony fragments. It was decided not to subject the patient to any more operative intervention on account of the long time since the injury, the previous operation,

and the tendency towards a steady improvement. Thus his treatment in the hospital was mostly symptomatic and nursing. It is interesting to note that while he was in the hospital he developed a cystitis which is so difficult to prevent in a patient of this type. Dr. Orr was consulted to treat this condition and an almost complete recovery resulted.

The patient urged constantly that something be done or attempted to relieve him. Dr. Francisco was consulted relative to some form of splint or cast in order to aid the patient to try to walk. Attempt with a cast was not very successful, chiefly on account of the great amount of trophic disturbances. He would tolerate but very little pressure in the lower extremity. After a few weeks trial with a cast a small pressure sore started. Thus the cast had to be discontinued.

Two neurological facts in this case seem to be of particular interest. (1) That with the improvement in his condition more pain resulted, in areas where returning sensation was taking place. (2) That the operation which was performed a few days after the injury and about one year before the patient entered Bell Memorial Hospital, was at an area of the spinal column at least three segmental areas too low. A line of incision from the fifth dorsal spinous process to the eighth would have been a more correct area. More often inaccurate incisions are made too low than too high. The most accurately located incisions are made only after a most careful neurological consideration of the case.

R

Femoral Hernia of Ovary

Two cases are reported by W. W. Grant, Denver (Journal A. M. A., July 24, 1920), in which he operated for ovarian hernia in the crural canal. He says that no reducible, herniated ovary should be removed during the child-bearing period if it can be effectively replaced within the abdomen and its recurrence prevented by operation. At other times and when required by pathologic considerations, its removal is advisable.

**THE JOURNAL
of the
Kansas Medical Society**

W. E. McVEY, M.D. - - Editor

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The Nurse Problem

The nurse problem is not at the present time a matter for hasty consideration. At least, there is now no emergency demanding immediate production without regard to efficiency of the product. That such an emergency may arise at any time must of course be anticipated, but until it does arise the quality of the nurses supplied must be regarded as quite as important as the number. In such emergencies as occurred last winter and the winter before it is necessary to supplement the supply of trained nurses with those who have been hastily prepared to meet as well as they can the requirements of the occasion. It hardly seems, however, that such occurrences should justify any serious anticipation of any necessity for reverting to the old custom of caring for the sick.

Those who practiced medicine under the old regime, when trained nurses were rare articles, will not now complacently dispense with her services. The nurse problem is in a critical stage in Kansas, but it is doubtful if it will be advantageously solved by lowering the requirements for admission to the training school; nor without some difficulty by shortening the period of hospital service. It is important, at least, that the requirements for admission should

not be lowered. The period of training might be considerably shortened, without lessening the efficiency of the graduates, under certain conditions. An intelligent young woman properly qualified for admission should be made quite efficient in a much shorter period of hospital service than is now required by the training schools. But, even with full classes in the training school, the demands of the hospital service are so great that the necessary study hours and class periods to complete the course of instruction are frequently encroached upon. With the unusually small classes now in attendance at all the training schools in the state, it is almost impossible to provide the necessary class hours except at the expense of the hospital service or the normal rest periods of the pupils.

When it is possible to adopt an eight-hour service schedule class hours can be easily arranged, but at present there are few hospitals in the state with classes sufficiently large to maintain an eight-hour schedule. The period of hospital service could be cut in half without sacrificing anything in the efficiency of the graduate if the class room work prescribed for the training schools could be completed before the student enters the hospital. By intensive courses in all of the subjects required by the training school the curriculum could be completed in three months and the students would have a better knowledge of the subjects taught than many of them now have after three years of instruction. They would be better qualified for the duties assigned them in the hospital and would more readily acquire the technical skill which it is the purpose of the hospital training to give them.

In order to make such a plan practicable the course of instruction should be standardized so that the student who has completed the curriculum prescribed may be admitted to any training school in the state. Special text books on each subject should be prepared—text books which will present only those parts of a subject that will be of some practical value to the nurse in her

future training and her subsequent professional work. Authors of the text books now in use show a remarkable diversity of opinion as to what a nurse should know. There are few, if any of them dealing with medical subjects that would meet the requirements of any desirable standard.

Such a course of instruction could be given at the State University, at the State Agricultural School, at Baker and at Washburn and possibly other colleges in the state.

The hospital training schools naturally view with suspicion any plan which contemplates shortening the period of hospital service. For, unless the number of students can be very considerably increased the hospitals will be seriously handicapped by lack of help. Whatever plan is adopted for shortening the period of training must promise an efficiency equal to that of the present training courses, and must also offer some assurance of increasing the number of students.

Several reasons are advanced for the indifference with which desirable young women view the opportunities offered in the profession of nursing since the war. In spite of the wonderful patriotism shown by American nurses and the most excellent service they rendered both in the army camps here and in France, the impression seems to prevail that the profession has lost rather than gained in popularity. It is hard to believe that such is the case. One would more readily accept some of the other explanations. One of these is that there are so many other occupations, now open to women, which offer as good or better returns and which require very little or no preparation. It is claimed that the length of the training course is too long and too strenuous for the compensation to be expected when the course has been completed. It is also claimed that nurses do not have the social recognition that should be accorded them.

These are plausible explanations which place the objections to the training course upon conditions which can be remedied.

The course is too long—unnecessarily **too** long. Thirty-six months is the time requirement for a course in medicine, but **more** practical experience with the sick is required of the student nurse than of the student in medicine. At least this much of the first objection may be corrected by standardizing the training schools. The matter of compensation will adjust itself with a return to normal economic conditions. Under present conditions the compensation received by trained nurses is considerably better than that offered by most occupations in which women are employed, for when on duty they receive their board in addition to their fee. If the course of training were shortened to two years, the compensation would be a much greater inducement than it is now.

Social recognition will be accorded the nurse when the nursing profession is in a position to demand it. Such a position may be attained by more careful selection of students for the training school and by placing the courses of training on a higher educational plane. If the preliminary course of instruction be given, not in the high school but in the college, it must attract a higher class of students than the majority of those who now apply for admission to the training schools. If a degree were granted to those who complete the college course of preparation and afterward serve a prescribed period in the hospital, the appeal would be still stronger to those who would do credit to the profession and ultimately insure its social recognition.

That our training schools and courses of instruction must be standardized; that the training course must be shortened without sacrificing efficiency and that it must be made more attractive to desirable young women are propositions that cannot be safely ignored.

— R — Public Health Expansion

With the growing activity of the public health departments, with the publicity which is permissible to the various agencies which have been put into the field, and the aggress-

sive policies which have been quite universally adopted, the time rapidly approaches when some decisive line must be drawn between the functions of the various public agencies and the professional privileges of the medical profession, at least that part of the medical profession not already identified with the public health service.

One cannot criticize the enthusiastic efforts of the public health departments to control the spread of disease and to this effort every conscientious physician should and does lend his hearty support. So long as it is possible for the medical profession as a whole to cooperate wholeheartedly in these efforts there will be no occasion for conflicts of authority and no questions of a divided interest. The profession, however, has a place in the economic welfare of the country, it has been and always will be regarded as playing an important part in the health status of the country, a part essentially distinct from that of the public health agencies.

There should be harmony and cooperation between them. The public health department is made up largely from the medical profession, in fact, is largely a part of the medical profession. It should be governed by the same general principles of ethics as other parts of the profession. While the nature of the work, the critical peril which must sometimes be combatted, may sometimes, perhaps frequently, justify methods which in other parts of the profession would be objectionable, there is not the same reasons for ignoring these principles in efforts to expand the very excellent service now rendered, especially when such expansion exceeds the proper limits of public health service.

Public clinics are held in New York, clinics in which men, eminent in particular fields of work, take an active part. These public clinics render a valuable service to the people and to the profession, but there are certain rules that are carefully observed.

They are free clinics conducted by the State Department of Health but only those people who have been referred by their attending physician are examined and the

diagnosis and suggestions for treatment are given only to the attending physician. We quote the following from the news matter concerning the clinic at Goshen:

"Patients are referred to the clinic by their attending physician. After a careful history of the case the patient is referred to the proper consultant for examination. If the consultant thinks that additional information is necessary before a diagnosis is made, such as laboratory examination or an X-ray examination or examination by another consultant, the case is referred to that department.

"When the examinations are completed the consultant reviews all the evidence, makes his diagnosis and any recommendations concerning the future course of procedure for the patient. All this information is then forwarded to the patient's attending physician. It is obvious that under this arrangement the relation between the patient and family doctor is not altered in any degree, and that the clinic is conducted along ethical lines."

There can be no objections to clinics conducted in this way, and there is no doubt but physicians would be glad to avail themselves of such opportunities to secure expert opinions and expert assistance in the treatment of many of their cases. There should, however, be added another rule which is no doubt carefully observed by the New York physicians. It should be regarded as quite as unprofessional for one of these men to accept for treatment one of these clinic cases as it would be to accept for treatment a case to which he was called in private consultation.

R

ETCETERA

It takes a strong imagination in a man that is penniless to make a long invagination of a pocket he thought tenantless, and think himself a rich man, proclaim himself a winner when he's just an also-ran, a most ungodly sinner; should he find on close inspection just a thin and perforated dime, that would have met with prompt rejection at a more remote and more auspicious time.

Neither of the two old party candidates

for the presidency of the United States seems to be much concerned about the great industrial problems, the high cost of government, the burdensome taxation and other matters of vital interest to the people.

It seems rather that they are both trying to divert the minds of the people from these subjects by discussing the enormous campaign funds of each other and that much frazzled topic—the League of Nations.

R. Allen Bennett, in a paper which appeared in the British Medical Journal, Aug. 28 says: "It may be that the appendix has an even closer connection with the intestinal movements than a simple mechanical control suggests; it is credited by Heile with a hormone, which powerfully excites peristaltic action, and it is probable that a pathologic change in the appendix would in some way check or alter the formation of this internal secretion."

Twining reports a case of rupture of the vagina during coitus (Brit. Med. Jr. 9-11.) The woman was 30 years old and had given birth to 3 children the last one being six weeks old at the time of the accident.

McDonagh, in his recent publication on venereal diseases, advances some new theories in syphilology. One of his rather interesting observations is that the future course of syphilis can be prognosticated by careful clinical observation of the type of chancre present. According to him a papulo-ulcerative chancre indicates a high resistance on the part of the host, and the disease usually runs a mild course. The papuloproliferative chancre is apt to be followed by recurrences. Granulating chancres, although resistant to treatment, are seldom followed by vascular or nervous sequelae.

From observation made upon 115 children showing various disturbances of the glands of internal secretion, Pentagna concludes that syphilis is the most important factor in the pathogenesis of endocrinie disturbance. In the majority of cases, however, the influence of syphilis should be regarded, not as a direct effect, but as due to the action of syphilitic toxins on the embryo, giving rise to congenital lesions in the glands of internal secretion.

It may be mentioned that Pentagna's conclusions were based upon the findings in these 115 children, of a definite history or suspicious evidence of syphilis either in the children or their parents in about 75 percent.

The Standard Oil Co. is sending out from

44 Beaver St., New York, a little booklet giving the names, and some brief data concerning the lives of those doctors who have been nominated for the Hall of Fame.

Postal cards are also being sent out upon which each doctor is requested to express his preference. While the medical profession has no voice in the selection, it is not improbable that their views in the matter may have some weight, with those who are authorized to make the selection. The following have been nominated for the Hall of Fame and are being voted on: Ephriam McDowell, James Marion Sims, Lyman Spaulding, Walter Reed, Benjamin Rush, William T. G. Morton, C. T. Jackson, Crawford W. Long, William Tillinghast Bull, Frank Abbott, William Shippen, Jr., James Murray Carnochan.

It will be of some interest to the physicians in Kansas to know that the school of medicine of the University of Kansas has been placed on the list of institutions recognized by the Board of the Royal College of Physicians and Surgeons of England. This recognition is only extended to "Grade A" Schools.

Price, discussing the possible dangers to both mother and child from the injudicious use of pituitary extract, recommends that the dose be carefully regulated. He suggests that 3 minims may be given every twenty minutes until satisfactory pains are established, but that 1c. em. should be the minimum quantity used in any case of labour.

From experiments upon rabbits to determine the effects of adrenalin upon vessel walls, Palettini concluded that "adrenalin seems to act on the muscle fibres of the vessel by direct contact rather than by the hypertension which it causes."

Strapeni has reported a case of obstinate salivary fistula in which a cure was obtained by injecting alcohol into the trigeminal nerve at the foramen ovale. The result of the injection was a paralysis of the auriculo-temporal branch arresting the secretion of saliva thus allowing the fistula to heal. Two injections were given nine days apart.

Keekzeh in a study of predisposition to tuberculosis asserts that the greater number of the family affected among the descendants, the greater is the predisposition of the individual. If the brothers and sisters of an individual had died from infectious diseases there is a greater tendency to tuberculosis

in the individual. The nearer the birth of a child to the death of the parents from tuberculosis, the greater the danger of the child's death from this disease.

The attention of our readers is invited to the brief article on "Adrenalin in Medicine" which will be found in the advertising section of the current number of this journal. While, obviously, this space is purchased for advertising purposes by Messrs. Parke, Davis & Company, it has been put to a novel use by the publication therein of a scientific essay of unusual merit in which a vexatious problem is discussed.

Whatever intelligence the future has in store on the pathology of asthma, the present state of our knowledge justifies the use of any dependable therapeutic measure for the relief of the acute paroxysm. Morphine is objectionable for reasons that are generally accepted. Per contra, Adrenalin does not narcotize the patient. It affords him almost instant relief, with no disagreeable sequela to mar the effect. To quote from the announcement under consideration, "Adrenalin is the best emergency remedy for the treatment of the asthmatic paroxysm at the command of the physician."

Two to ten minims of the 1:1000 solution are injected subcutaneously or into a muscle, relief usually following in a few moments.

The latest report on the prevention of goiter by administration of sodium iodid by Marine and Kimball—an investigation carried out under a grant from the Therapeutic Research Committee of the Council on Pharmacy and Chemistry—indicates a striking difference between those girls not taking and those taking iodin. The difference is manifested both in the prevention of enlargement and in a decrease in the size of existing enlargements. Of 2,190 pupils taking 2 gm. of sodium iodid twice yearly, five have shown enlargement of the thyroid, while of 2,305 pupils not taking the prophylactic, 495 have shown enlargement of the thyroid. Of 1,182 pupils with thyroid enlargement at the first examination who took the prophylactic, 773 thyroids decreased in size, while of 1,048 pupils with thyroid enlargement at the first examination who did not take the prophylactic, 145 thyroids decreased in size (Jour. A. M. A., Sept. 4, 1920, p. 674.)

A report from the Connecticut Agricultural Experiment Station on diabetic foods includes not only the content of carbohydrate in these products but also that of protein and fat in view of the recognized

necessity of taking into account all of the nutrients in any proper formulation of regimen for the diabetic patient. There is no satisfactory definition of what a diabetic food is, nor is there any universal diabetic food. The value of accurate information regarding the makeup of such products as may find special application in the dietotherapy, such as given in the Connecticut report, lies in the fact that it enables clinicians and the patient to proceed intelligently in the direction of diet planning with a view to tolerance of all the nutriments. Of particular interest in the report are the analyse of bran, which is being widely used at present to give bulk to the food residues in the alimentary canal. It appears that common, unwashed bran frequently contains no more than half as much starch as some of the advertised brands of "health" bran (Jour. A. M. A., Sept. 18, 1920, p. 818.)

A method of treatment for absorbing boils and carbuncles has been suggested by Pacieri which theoretically seems to promise results. A small hypodermic syringe is filled with a ten per cent solution of tincture of iodine, and the needle is driven into the center of the boil midway between the apex and base, and half to three-quarters of the fluid injected according to the severity of the case. The idea is that the iodine arrests the development of saphyococci.

In the Directory which is now being put in type the names of all members of the Society, in good standing, will be printed in capital letters. Those who are not members of the Society will be printed in small letters. Only the place and date of birth, school and date of graduation, date of license in Kansas, specialty if any, and the address will be printed. Considerable other information was requested and usually supplied, but this was intended for the permanent record which will be kept in a card index file. It is intended to maintain a record of this kind of every practitioner in the state.

The experience of the Collection Bureau indicates that too many people move before they pay their doctor and forget to leave their new address. About ten per cent of the notices sent out are returned because the parties are not found at the address given. We are publishing a list of these every month and will be very glad to receive information concerning any of them. One may be sure that people who leave one community without paying their bills will very likely do the same thing in another community. It may

be profitable for you to look over the list in this number of the Journal.

Just what is ethical conduct in certain professional relations is at times rather hard for the average man to determine. Generally speaking one should always do as he would be done by, but perhaps there are instances where one's professional ethics might thus conflict with his ethics in general. There are instances, no doubt, where it is difficult for one to be honest with himself and fair to the patient without giving some cause for complaint to a fellow practitioner. Such instances are rare, in fact, where there is harmony among the members of the profession in any locality there is very little to complain of in the matter of ethics. It is very easy to be perfectly ethical with one's friends on any occasion.

Blanks for Directory data were mailed to every practitioner in the state that could be located. A majority of them were promptly returned with the desired information. A second lot of blanks was mailed to those who failed to respond to the first. A great many responded to the second request, but there are still a great many who have not yet supplied us with the data required. In these cases the names will be given and such data as we are able to secure from other sources. It is surprising how many men have apparently forgotten the correct title of the school from which they graduated. We have had a half dozen different names for one school.

R

Fable for the Kansas Doctor

BY RENNIG ADE

Once upon a time a Kansas Doctor decided to spend his vacation down in the Ozarks. Previous years he had gone to the Rockies. He was convinced that this was the logical thing to do, and the circulars he had been receiving all the hot summer from the cool recesses of that piscatorial paradise cinched the deal. He strained at the leash of professional duties day by day, until finally the weakened strains parted and he was off.

The aforesaid circulars depicted a cool, shady recess with precipitous banks, and magnificent trees with dense overhanging foliage. Standing in a boat could be seen a bucolic individual with a lop-sided straw hat over-topping a head of questionable intelligence. But most important, in the out-

stretched hands of this individual, and extending from McBurney's point to the metatarso-phalangeal articulation, was a string of black bass about fifteen in number. Every expression of the angler would indicate he had caught these fish and that fishin' was tolerable that afternoon. The deduction would naturally be that if a gink of this physiognomy and an old willow pole could get a string of bass of this number, what might not be the possibilities of a medical man equipped with expensive rod and reel and bait delicacies that modern bass crave?

In company with two friends—and the latter term is used advisedly—and their families tucked away in large touring cars among suit-cases, fishing equipment, folding cots, shovels, tents, hot-water bottles, ice-bags, palm-beach clothing, foot warmers, and anything else that was not nailed down at home; they sallied forth at 7 a. m. one bright September morn, for the Ozarks 500 miles away.

The down trip was uneventful, barring the fact that the cork came out of a bottle that had been carefully treasured for the occasion, and the contents thoroughly incorporated with some special clothes that the ladies had packed in the same suit-case. After considerable parley and exchange of cutting remarks, and as the end of the trip was only a few hours' drive, it was decided to go on in spite of the loss of the bottle.

As they neared their destination and inquired regarding the fishing, reports were most favorable. Nearly every one told of the big cat-fish that were being caught on trot-lines. The Doctor and his friends smiled patronizingly, and patiently explained they were not looking for cat-fish and trot-line fishing, but were there prepared to snare the wary bass. To substantiate this, artificial wobblers, craw-dads, minnows, and bottles of long pieces of pork were exhibited to the astonished natives. The last word of advice, however, given by the old settlers was "to bait with liver or worms and run the lines at 10 p. m. and also at daylight on account of the turtles."

Camp was made on the banks of a beauti-

ful stream from which is sent out each year one million dollars worth of propaganda to entice the credulous fishermen.

They learned that the fishing had been good the week before they arrived, and all indications pointed to it being good the week after they left—if they stayed long enough. This is a fishing axiom from which there is no variation, and holds good in the Ozarks as well as in the Rockies. Fishing demoralizes. Men of severe truthfulness in business matters will glance around to see if the children are listening, then lower their voices and without the flicker of an eyelash unburden themselves of a personal fishing experience that would make Ananias turn green. When one of the natives shows an aptitude far above the ordinary in this line, he is made a guide, and is now harmless as no one ever believes him. Nor does this affect the general disposition of the latter, for the democracy of his nature permits him to drink with equal condescension the 20-year bonded product of the rich barber from Joplin and the diluted "mule" of the obscure Kansas City banker.

For the first three or four days the Doctor and his two co-fishermen threw every kind of temptation across, over, under and through the muddy water, but never did a bass vouchsafe a look of curiosity let alone interest. Night after night they met at the cabin with stony stares, and after the humble meal was served proceeded to back a pair of fives or four clubs and a diamond with vicious disregard of gentlemanly proprieties. The children kept out of the way, and the wives prepared the ration in a reconciled "I thought so" manner.

The crisis came when the "Judge" was heard to casually inquire "where could a man find some worms?" This opening justified the Doctor in announcing he was going to town four miles away to get a shave. In reality he went after liver. Liver for catfish. Liver to put on a trot-line at night, and to go out the next morning at daylight with eager eye and buoyant stride hoping it has been swallowed by a nice big slimy mud-cat that has been feeding all season on a

dead horse around the bend. Did they scorn the cat-fish? They did not. They ate every one they could get hold of. They baked them and fried them and made soup of the bones. By handling different kinds of diseased and deceased tid-bits that cat-fish relish they soon began to smell like a Cape Cod whale cannery, and refused to eat at the same table or play the great American game with each other. But they grew strong, slept soundly, and in their avid pursuit of the torpid mud-cat became almost as adept as the native angler.

The expensive six-hook wobblers were packed away as being too dangerous to use anywhere but on the ocean. This conclusion was reached one afternoon when the most muscular of the Doctor's companions, in attempting a hundred foot cast succeeded in burying an artificial craw-dad with eight hooks and weighing one-fourth pound in the Doctor's fourth intercostal space. The unlucky easter was forced to listen to a brief dissertation on the folly of the law that permitted oxen to indulge in the sports of gentlemen, and incidentally was consigned to a place where he might safely go with out his foot-warmer.

This and the tragedy of the ill-fitting cork were about the only casualties of the trip. The return journey was made without incident, the whole party voting it a most enjoyable outing; the real thrill, however, being the first sight of the stand-pipe of the old home town.

Moral—Not all the fish are in the water.

B

SOCIETIES.

Northeast Kansas Society

The regular semi-annual meeting of the Northeast Kansas Society will be held in the Chamber of Commerce, Kansas City, Kansas, October 28th, beginning at 1 o'clock p. m. Medical and Surgical clinics will be held at Bethany and St. Margaret's Hospitals at 9:00 a. m. The following program has been arranged for the meeting:
Frontal sinus Diseases.
Dr. E. P. Hall, Kansas City, Mo.

- Reminiscences
Dr. C. C. Goddard, Leavenworth
 Perforated Duodenal Ulcer.
Dr. H. L. Charles, Atchison
 Syphilis in The Innocent.
Dr. H. G. Collins, Topeka
 Aortitis and Aneurysms.
 ..Dr. W. T. McDougall, Kansas City, Kas.
 Use of Osteo-Periosteal Transplants in
 Closure of Cranial Defects.
 ...Dr. C. C. Nesselrode, Kansas City, Kas.
 Hormones and Hormone Action.
Dr. C. F. Nelson, Lawrence
 Basal Metabolism.
Dr. P. M. Krall, Kansas City, Kansas
 The Thyropathies.
Dr. P. T. Bohan, Kansas City, Mo.
 Surgery of The Thyroid.
Dr. T. G. Orr, Rosedale
 The Thyroid in Psychiatry.
Dr. Karl A. Menninger, Topeka
 Discussion opened by Dr. L. S. Milne,
 Kansas City, Kansas.

Complimentary dinner 6 p. m. for guests
 and members of the society given by the
 Wyandotte County Medical Society.

Shawnee County Society

The regular monthly meeting of the
 Shawnee County Medical Society was held
 Monday evening, October fourth, at the
 Elk's Club.

Dr. Richard L. Sutton of Kansas City,
 Missouri, gave a very interesting talk on
 "Cancer of the Skin", and showed a great
 number of lantern slides illustrating his
 talk. He also demonstrated a number of
 clinical cases.

The next regular monthly meeting will
 be held at the State Hospital, Monday
 evening, November 1. The program will
 be in charge of Dr. M. L. Perry and his
 assistants. Out of town medical men are
 invited.

EARLE G. BROWN.
 Secretary.

Cowley County Society

The Cowley County Medical Society held
 their regular monthly meeting at Gueda

Springs, Sept. 16. Dinner was served at
 6:30 to the members and their wives, at
 the hotel. The ladies were entertained
 while the regular business session was held.

Nephritis was the subject under discussion. Dr. T. T. Holt of Gueda Springs read a paper on the Medical Treatment. He emphasized the importance of determining the nitrogen retention and elimination in making a prognosis. The diet is a matter of the individual and in the average case the amount of protein should not be cut below about 40 gms. a day if the diet is to be maintained for any length of time. The patient may continue to have a trace of albumen in the urine after the kidney lesion has healed. Dr. Holt favors a diet low in fats and high in carbohydrates for the routine cases.

Dr. L. A. Jacobus of Winfield discussed the Surgical Treatment. He agreed with the previous paper that the removal of the fluid accumulations in the edema cases was not always indicated and that the blood pressure should not be lowered below the point where full compensation is maintained. He believed that ether was the anesthetic of choice in nephritic cases. While decapsulation of the kidney has given good results in a few cases nephritis is a condition for medical treatment.

Dr. F. M. Wilmer of Winfield read a paper on the Eye in Nephritis. He mentioned a number of cases that came to him with the first symptom that had been noticed being that of a failing vision and when a complete examination revealed a well advanced case of nephritis. Cases in which an albuminuric retinitis have developed are well advanced and usually terminate in a few months. In the toxemias of pregnancy a larger percentage of these cases will recover.

In the discussion which followed numerous cases were mentioned bearing on the various points brought out in the three papers.

Dr. W. H. Payne of Arkansas City was admitted to membership by transfer from the Oklahoma State Society.

Dr. M. M. Miller of Arkansas City was elected to membership.

Drs. Collins and Thompson of Oxford were guests of the Society.

COWLEY COUNTY NOTES

Dr. Geo. Emmerson of Winfield who has been reported seriously ill for the past few weeks is slightly improved. His condition is still regarded as critical.

Dr. W. H. Payne formerly of Ponca City, Okla. is now associated with Dr. R. C. Young of Arkansas City.

Dr. G. M. M. Miller of Arkansas City is a new member of the Cowley County Society.

Dr. Walter P. Guy, formerly of Winfield, has moved to Los Angeles, Calif., where he will specialize in Obstetrics. Dr. Guy recently finished a years postgraduate work in the Chicago Lying In Hospital.

C. C. HAWKE, M. D.,
Secretary.

—R—

C. & C. Bureau

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accouts, give the name in full if possible, the occupation if known or can be learned, the correct address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

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Beach, Chas.	Topeka Towel Supply, Topeka, Kans.
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Baker, Lee	Lincoln, Kans.

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Binkley, Clarence	811 Kans. Ave., Topeka, Kans.
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Blum, John	Parsons, Kans.
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Branock, L.	1942 Topeka, Topeka, Kans.
Brassfield, G. M.	Council Grove, Kans.
Brooks, Joe	525 N. Emporia, Wichita, Kans.
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Brown, Geo. A.	Abilene High School, Abilene, Kans.
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Burns, Claude A.	Elk Falls, Kans.
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Cook, H. O.	Police Dept., Topeka, Kans.
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- R -

Relation of Hyperplasia of Endometrium to So-called Functional Uterine Bleeding

The cardinal points elaborated by Emil Novak, Baltimore (Jurnal A. M. A., July 31, 1920), are: 1. Functional uterine bleeding, occurring in the absence of any gross pelvic disease is very common at the menopause, when it often leads to the suspicion of malignancy. It is next most frequently observed at or near the time of puberty, but

it may occur at any age. The bleeding is commonly of the type of menorrhagia, with not infrequently periods of amenorrhea.

2. A frequent histologic finding in these cases is the condition that has been called hyperplasia of the endometrium. This is characterized by an overgrowth of both the epithelial and stromal elements of the endometrium, with the production of a perfectly distinctive histologic pattern, which makes its recognition easy by means of the microscope.

3. There are good reasons to believe, as I have shown, that hyperplasia is not a primary disease of the endometrium, but that it is secondary to an endocrine disturbance of the ovary. The exact nature of this functional disorder, and the precise histologic changes in the ovary which are associated with it, have not as yet been satisfactorily determined.

4. The secondary nature of hyperplasia of the endometrium explains the failure of curettage to bring about permanent cessation of the menorrhagia observed in these cases. This procedure merely attacks a local manifestation of the underlying cause—an endocrine disturbance involving the ovary.

- 1 -

The Therapy of Adrenalin

The important position of Adrenalin in the *materia medica* is undoubtedly attributable to the vast amount of scientific work that has been done in connection with the product, to say nothing of the marvelous array of clinical facts that have been accumulated and now constitute the basis of our knowledge of its therapy.

This thought is suggested by the appearance in our advertising section, this month, of a unique announcement from Parke, Davis & Co. entitled "Adrenalin in Medicine," which every medical practitioner should read. It deals with the physiological action of the medullary suprarenal principle and reflects a clear light upon a subject concerning which much misinformation persists, even in medical circles. This, we understand, is the first of a series of short essays that will have to do with the scientific aspect of the subject rather than its commercial features. Others will include discussions of "The Treatment of Asthma"; "The Treatment of Shock and Collapse"; "The Treatment of Hemorrhage"; "Adrenalin in Combination with Local Anesthetics"; "Adrenalin in Organo-therapy."

These topics appeal strongly to the progressive physician who seeks to be well informed. New facts are being constantly developed in the domain of endocrinology; and

as this series of concise "talks" will cover the field pretty thoroughly, in so far as Adrenalin is concerned, it will be well worth while to review them.

R Coagulation Time of Blood

Statistics from New-Born Clinic, University of Minnesota, show that postmortem examinations reveal cerebral hemorrhage in more than 50 per cent. of all infants that die *intra partum* or during the first few days of life. It was notable that these findings often were made following noninstrumental or even easy deliveries. They were especially frequent following breech presentations and in premature births. The factor of asphyxia neonatorum to which Little, Cushing and others ascribe the cerebral damage, F. C. Rodda, Minneapolis (Journal A. M. A., Aug. 14, 1920), says was not always present. It was further noted that at necropsy the blood was often found only slightly coagulated or even fluid. Severe trauma results in massive hemorrhages and early death. A more frequent cause of cerebral hemorrhage is mild trauma plus hemorrhagic disease of the new-born, accompanied by findings of delayed coagulation time and prolonged bleeding time. A delayed coagulation time and prolonged bleeding time can be controlled by the subcutaneous injection of whole blood. This is a rational therapy in cerebral hemorrhage. In severe cases, surgery should be employed early; operation should be controlled by blood studies and the injection of blood if indicated. The coagulation time and bleeding time should be determined in every new-born presenting unusual symptoms, or better, as a matter of routine. If reactions are delayed, blood should be administered.

R

Hypertrophic Pulmonary Osteo-Arthropathy Following Lung Abscess

In the case reported by Ethel Flagg Butler, New York (Journal A. M. A., July 24, 1920), there was an involvement of the left lung, probably the effect of an aspiration infection following tonsillectomy under ether. There was a chronic productive cough. There was a rapid enlargement of the feet and hands during a period of six months. A lung abscess was drained, September, 1918, with a resulting persistent bronchial fistula. Mental depression and insomnia were present. There was a slight loss of weight. There was no evidence of syphilis or tuberculosis. The pathologic condition in the enlarged hands and feet and other regions was best revealed by the roentgenograms, which showed besides the enlargement of the overlying soft parts,

a definite striated production of new bone in the periosteum of the shafts of the metacarpals and the first two rows of the phalanges, also along the lower ends of the radius and ulna. The corresponding bones of the lower end of the femur; also the clavicles and some of the ribs were to a degree affected. The joint surfaces appeared unaffected. There was fluid in the knee joints. The fingers were not "clubbed." No pituitary or thyroid changes were present. There were no headaches, disturbance of vision nor drowsiness; on the contrary, there was very marked insomnia. There were no changes in face, lips or skull. There was no evidence of abnormal thirst or hunger, and there were no alterations in the special senses. The case is of particular interest in reference to the improvement in the osteo-arthropathic condition that followed the elimination of the focus of infection in the lung. It may serve as a plea for early definitive surgical action in similar cases.

R

Indifference of Laryngologists Toward Tuberculous Laryngitis

William V. Mullin, Colorado Springs, Colo. (Journal A. M. A., July 31, 1920), urges that a more active interest in tuberculosis should be taken by laryngologists. There should be more thorough and uniform teaching of the diagnosis of this disease, and it should be carried on in such a way that the student will have opportunity to examine large numbers of incipient cases, and to see these repeatedly, and thus familiarize himself with the laryngeal image seen in tuberculosis as compared with that found in other allied conditions. Mullin suggests that a committee of laryngologists representing the various laryngologic societies may be formed to meet with a committee from the National Association for the Study and Prevention of Tuberculosis for the purpose of standardizing the literature and teaching of this subject, and with the further object of stimulating clinical investigations and pathologic research concerning this condition.

R

Infrequency of Intestinal Parasites in Young Children

The number of stools found harboring intestinal parasites in the entire group of 308 cases on which Stafford McLean, New York (Journal A. M. A., June 26, 1920), reports was only seven, or 2.27 per cent. Of these seven cases, the presence of parasites was determined in four cases by the finding of ova, and in three by the presence of the parasites. Of fifty-three examinations of infants during

the first year, none were positive. Of sixty-six during the second year, none were positive. Of sixty-four during the third year, three were positive. In one child, 28 months of age, the ova of Ascaris were found; in another the same age, the Ascaris parasite, and in a third, 26 months of age, the Oxyuris parasite. Of fifty-six examinations in the fourth year, there were no positive cases. Of sixty-nine examinations in children from 4 to 12 years of age, four were positive; one, aged 6 years, with the ova of Oxyuris; another, aged 4 years, with the ova of Ascaris lumbricoides; another, aged 7 years, with Oxyuris vermicularis as well as the ova of Ascaris lumbricoides, and one, aged 4 years, with Oxyuris vermicularis. Of sixty-nine children from 4 to 12 years of age, 5.7 per cent harbored intestinal parasites. Of 189 children from 2 to 12 years of age, 3.7 per cent harbored intestinal parasites.

R

Soaps in Relation to Their Use for Hand Washing

Sterile hands are not obtained in the ordinary process of hand washing. More bacteria were found by John F. Norton, Chicago (Journal A. M. A., July 31, 1920), to be removed by the ordinary toilet soaps than by the special soaps. In other words, the cleansing properties of a soap are more important than its "germicidal" or "antiseptic" constituents. The soap solutions obtained in hand washing are of no practical germicidal or antiseptic value. The soap left on the hands after washing has no germicidal action. In the whole process of hand washing done in the usual manner, the special so-called "germicidal" or "antiseptic" soaps exhibit none of these properties. Therefore, these terms are not proper to use in connection with soaps. Finally, since the hands may serve as a medium for the conveyance of bacteria in infectious disease, it is important to remove these bacteria; and this may be done by the ordinary toilet soaps as effectively as by the special brands of so-called "antiseptic" or "germicidal" soaps, if not more effectively.

R

End-result of Hallux Valgus Operations

A report is made by Homer Waldo Spiers, Los Angeles (Journal A. M. A., July 31, 1920), of ninety-six cases. A result was considered satisfactory if the patient could pursue his usual occupation with little or no discomfort. There were seventy-eight operations classified as excision of the metatarsal head of these, 61 per cent were satisfactory and the remainder unsatisfactory. Of the latter group,

56 per cent had unsatisfactory after-treatment. Of this group whose results were not satisfactory, it was found that 70 per cent were compelled to follow occupations that required much standing and walking, working as waiters, policemen, cooks and mechanics and the like. The complaints were largely painful transverse arch (metatarsalgia), partial or complete ankylosis, deformity, or a combination of the three. There were eight operations performed by removal of the exostosis only. Seventy-five per cent were wholly unsatisfactory. Two patients expressed themselves as partially satisfied. In the seven operations by the Keller method, all the patients reported satisfaction and the examinations were uniformly good. This end-result study, analyzed as a whole, shows favorable results in about two thirds of the cases.

R

Intrapleura Hypertension for Evacuating Pus Through Bronchi

This method of treatment was employed by Alfred Meyer, New York, and Barnett P. Stivelman, Bedford Hills, N. Y. (Journal A. M. A., July 24, 1920), in a case of spontaneous pyopneumothorax with persistent bronchial communication. When the air was introduced for the first time the initial pressure was from 0 to + 2 cm. of water. The final pressure was 20 mm. of mercury. The patient expectorated about 60 c.c. of pus and the pressure fell to about 1 mm. of mercury. At the fourth injection, 1 c.c. of saturated aleoholic solution of methylene blue was also injected. Immediately thereafter, 150 c.c. of air were injected, and during the procedure about 150 c.c. of blue sputum were coughed up. The fever chart showed an average reduction of 2 degrees for three days following this purely diagnostic methylene blue injection. At the first attempt 50 c.c. of 1: 10,000 watery iodin solution were injected into the pleural cavity. The patient brought up about 150 c.c. of pus during the operation. The iodin solution did not cause any unusual irritation. At the sixth attempt, no hypertension was obtainable even for a short period, for there was evidently insufficient pus in the pleural cavity to cover the pulmonary opening.

R

Subcutaneous Phlebectasis of Lower Thoracic and Upper Abdominal Regions

In the course of the routine examination of patients, Williams Gerry Morgan, Washington, D. C. (Journal A. M. A., June 19, 1920), has noted persons presenting a peculiar dilation of the cutaneous veins in

the diaphragmatic area of the chest and upper abdomen. These veins stand out in an irregular wreath shape form, most often occupying the right diaphragmatic area, but occasionally the splenic area. In some instances the veins extend from the axillary line to the other and down each lateral aspect of the abdomen and across the hypogastrium, thus forming a complete wreath. Two distinct types were noted—those in which the dilatation is in the form of telangiectasis and those which are true varices. Morgan has used the name "phlebectasis" to distinguish this affection. This condition is vastly more observed in men than in women and is an accompaniment of more or less profound pathologic changes of the midbody which without doubt affects most probably the liver, the heart or the great blood vessels.

B Cancer of the Rectum

The possibility of a permanent cure of cancer of the rectum by operation G. W. Crile, Cleveland (Journal A. M. A., July 31, 1920), says depends more on the stage at which the case is presented for operation than on even the most thoroughgoing technic; but maximum of operability, which means a safe operation with the removal of the maximum amount of tissue surrounding cancer, is a possible attainment.

To cancers which involve the lumbar muscles, which penetrate the bladder, which involve the liver, etc., operability does not apply. Death is generally due to infection and to the absorption of the toxins of feces. Among thirty-eight operative cases, Crile has not had a death.

B

Advantages of Local Anesthesia in Thyroid Operations

Joseph Rilus Eastman, Indianapolis (Journal A. M. A., July 17, 1920), favors local anesthesia in practically all cases of thyroidectomy. He does not see any advantage accruing from general anesthesia.

B

Duodenal Perforation Treated by Duodenal Alimentation

In the case reported by Max Einhorn, New York (Journal A. M. A., March 20, 1920), the diagnosis of a duodenal fistula situated between the pylorus and the papilla of Vater was established by the character of material oozing from fistula. The frequent absence of bile in it demonstrated that the opening must be situated above the papilla of Vater. This conclusion appears to find corroboration in the roentgen ray examination and also in the clin-

ical syndrome of the case. The treatment consisted of atropin in conjunction with the jejunal alimentation.

R

Development of Bactericidal Power of Whole Blood and Antibodies in Serum.

The claim is made by J. H. Black, Kenneth Fowler and Paul Pierce, Dallas, Texas, (Journal A. M. A., Oct. 2, 1920), that the bactericidal power of blood as determined by the method of Heist and Solis-Cohen is the most dependable criterion of the actual immunity of the animal. The development of the bactericidal power of the blood against typhoid and Shiga bacilli is practically identical with that of the serum. The route of inoculation makes no material difference in the rapidity or height of the development of bactericidal power. The agglutinins and complement fixing bodies are only roughly comparable to the bactericidal power. The leukocyte counts and phagocytic index are of no value in determining the degree of immunity. In the rabbit immunized to typhoid and dysentery bacilli, lysis occurs with great rapidity, and a short incubation period is sufficient. No evidence could be secured by the authors in their studies as to the mechanism of lysis. Phagocytosis, in all probability, was not a factor. Citrating and defibrinating blood of rabbits immunized to typhoid and dysentery bacilli did not affect the bactericidal activity save to slow the reaction. In the blood of typhoid and dysentery immune animals, contaminating organisms may grow luxuriantly. A short incubation period removes most of the difficulty due to contaminants. The refractory state of Teague and McWilliams is shown to depend probably on a rapid rise in bactericidal power, and the rapidity of mobilization of this power varies with the route of injection. Inactivation of serum of immunized rabbits did materially reduce the bactericidal action.

R

Epilepsy and Certain Types of Epileptiform Attacks.

Daniel D. V. Stuart, Jr., Washington, D. C., (Journal A. M. A., Oct. 2, 1920), believes it is unsafe to assume that any patient is a true epileptic until that patient has had the thorough examination that he or she is entitled to; and until, by this means, other convulsion-producing diseases have so far as possible been eliminated.

R

Conservation of Menstrual Function

W. J. Mayo, Rochester, Minn. (Journal A. M. A., June 19, 1920), urges that conser-



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THE JOURNAL

of the

Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, NOVEMBER, 1920.

No. 11

The Profession and the Public—A Plea for Closer Relationship

DR. H. C. EMBRY, HOISINGTON

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

My remarks will not have to do with any special subject in medicine, but rather shall I attempt to consider the profession and its relation to the public. Therefore it shall be my purpose to speak in perfect frankness, and absolute sincerity, only trusting that my poor effort may provoke profitable discussion.

As all of us know, there are abroad in the land, numberless isms and pathies ranging from christian science to the chiropractor, and the extravagant claims of these various cults appeal very strongly to the ever-credulous public mind. As a result of all this agitation a great many people have become confused regarding the true status of the regular doctors. Therefore we will consider the Doctor for a moment from the inside, as we know him to be. Let us also consider the environment in which he works and the forces which mold and shape him into a regular M. D.

Richard C. Cabot of Boston has very truly said, the codes and standards of the physician depend in part upon the peculiar strains and stresses, the special irritations and inspirations of his professional work. He is therefore branded and developed by his lot; remembering, of course, that to some extent every man is exceptional. His reactions to experience are in part unique, and to that extent he modifies the truth of any generalization concerning him. Nevertheless, there remains such a thing as the doctor's type, a group of habits characteristic of men who

have practiced medicine actively and in the open for a number of years. The doctor's ethics or habitual standards of behavior, then, take on greater interest if we view them not merely as peculiarities, but as the result of his responses to the world's call.

The world's call to the doctor is something like a fire alarm. His work has somewhat the aspect of a perpetual emergency in which he must keep a cool head. Hence he is schooled to the control of emotion, to the repression of all instinctive impulses, disgusts, horrors, and enthusiasms. Dignity is therefore one of his traditions; although the modern doctor has thrown off along with the frock coat, white tie, and high hat of his predecessor, much of the dignity and stateliness of his medical forefathers.

Dignity in the modern doctor takes the form of emotional reserve. He avoids the heights and depths and travels an even road. To let oneself out of one's own grip may be all right for a banker or a clergyman but it is bad form for the doctor. He often develops an unusual control of temper; he will not allow his hand or brain to be joggled by even a pardonable thrust of anger. The layman thinks he has a right to get mad sometimes; but the doctor while on duty, never. Of course doctors break their own rules in this as in other matters. Nevertheless the rules are there to break, clearly distinguished from the standards of the laity.

This emotional reserve, with all its virtues, is possessed of some serious faults. The doctor is called upon to face so many horrors unmoved in order that he may do his part in mitigating them, that he may lose the capacity to become horrified. The practical

and motor activities of his work may so affect his mind, that he never recoils, never revolts and never throws caution to the winds. And since there are times when the swift reactions of horror and revolt are every man's duty, the professional training of the doctor may be his undoing. He may suffer the insufferable and be blind to the entrance of the devil himself.

Courage has always been strong in him for certain situations and weak for others. To risk his life in fighting disease he will rarely hesitate and he does it without self-consciousness and as a matter of course, and any member of the profession who refuses to play the game, gets the strongest condemnation of his fellows.

On the other hand there has been until recently, little or no condemnation for the confrere who has been loath to confess his mistake of having performed a wrong operation or made a disasterously wrong diagnosis, and perhaps there are several pardonable reasons why veracity has been tempted in the doctor's mind by the dominant desire to help and comfort the patient and above all things, to do him no harm. All of us have been hampered in making an absolute fetish of truth speaking, by the very good reason that we were keenly aware of the fact that perhaps we did not possess the truth at all.

And just here we recognize the wide distinction between veracity and correctness. That the most ignorant and incorrect speaker may be utterly truthful and honest is a distinction quite often overlooked by the laity. And at times the distinction between veracity and correctness in medical ethics is especially blurred. For instance, I have known one or two chiropractor's who I think honestly believed the extravagant claims of their cult. And one could not fairly question their veracity and yet they were obviously incorrect. In general, medical standards demand that a doc'or may never lie for his own benefit but in dealing with patients it may be permissible for him to be governed somewhat by the patient's best interests. If these interests seem to demand that the truth be colored, shaded or suppressed, it is

then deemed pardonable for him to save the patient rather than the truth, remembering always as he muddles accuracy with honesty, that the unpleasant truth he suppressed may turn out to be no truth at all.

Against these almost insurmountable difficulties and perplexities, two slight counter currents are just beginning to make themselves felt. Both of them, mark the direction of a force which makes for the emancipation of the doctor from this class of bewilderment.

Modern surgery and modern scientific medicine invading the field of traditional medicine tends to breed in the physician the habit of looking for possible truth and depending on the verdict of reality, regardless of his or other's wishes. For instance, the surgical incision brings him face to face with the truth or falsity of his thoughts. Extraordinarily dramatic and weird is the result. All in a moment he is proved right or wrong and is satisfied. It matters not whether his beliefs have been supported or overthrown, he wins; because, having once committed himself to the arbitrament of reality, he wants the reality, whatever it is. Surgery then, even bad surgery, makes for mental cleanliness, and mental cleanliness is a potent aid to veracity.

Even the moderately truthful individual is tempted into strict veracity of statement if the picture within his mind as he speaks is sharply cut and brightly colored. Veracity, then, may even become the path of least resistance. On the other hand, in a mind full of fog and perplexity, the desire to be honest may easily lose its way. This fog is dispersed and veracity strengthened not only by surgical disclosures, but also by the use of exact methods of diagnosis.

Common to all these methods is the sort of passivity implied in the reading off of a result, as one reads the clinical thermometer, the blood pressure instrument, or the X-ray plate. In this way one acquires the habit of registering definite facts, by such a process of reading and recording, in time accustoms his mind to a kind of helpless dependence on facts. He loses the habit of

manipulating and shaping his statements to what seems best for the patient to hear, and grows almost hypnotized by truth as he sees it; so that, like Luther, he can do no other than report it.

So we find the doctor's ethics being shaped unconsciously by the revelations of surgery and the habit of reading off measurements on a scale. Thus he is being weaned from undue dependence on private persons and nourished by dependence on observed fact.

But there is also another new factor which is beginning perceptibly to reshape our ethics. I mean the recognition by the profession of the necessity for public education regarding health and sanitation. Formerly the doctor who could not win the favor of his neighbor when they called him in sickness, must starve or seek other employment. If the sick man and his family were afraid of open windows, then the windows must remain closed, even in pneumonia. The rich influential individual with the imaginary malady could hardly be shaken off and told the bracing truths which his condition demanded, and the doctor was almost compelled to satisfy his weakness in a rather humiliating manner. Until recently there was no money in serving the public good, and there is little, even yet. But a little goes a long way to change medical ethics. For even one or two public health officers paid to disseminate the unvarnished truth about open windows, imaginary diseases, and useless drugs, do get the ear of the public in a most surprising manner, and make it easier for the privately paid doctor to work straight for the patient's good, and that without bowing to hampering superstition. Thus the privately paid doctor grows bolder; he finds less temptation to act like a hired servant; he finds it easier to make his patient listen, obey, and become educated.

Thus public health agitation stimulates the doctor's ethical temper until he is less servile, more independent, and I trust, more efficient. Any doctor who writes to spread generally recognized truth about public health and the means of preserving and improving it, is now perfectly ethical. He must not exploit in the public press, his own discoveries or

recommend his own methods. That is highly unethical and brings expulsion from all reputable societies. But whatever truth can be brought to the public notice under the head of public health, and properly stated for the public good, will, I am sure, result in a just appreciation on the part of the public and in turn, bring about a marked reaction in medical ethics which will go far to create a sympathetic understanding between the profession and the common people.

Now let us for a moment consider the common people. This vast heterogeneous mass of humanity, partially educated, partially ignorant, clannish, credulous, impulsive, passionate, tempting every art of the demagogue. Its credulity is imposed upon, its patience inflamed, its cupidity tempted, its impulses misdirected, every avenue of approach to its intelligence debauched, and even superstition made to play a part in the campaign of the charlatan. This deplorable condition of affairs really does exist; the folly and the bitterness and the danger of which, every community has drunk deeply.

Against this deplorable condition of affairs, I am proud to say, have always been pitted the resolute, clear headed, broad minded men of the profession, men whose genius has made glorious every page of medical history; whose courage and fortitude have been tested in years of sacrifice and ceaseless toil; whose untiring energy has helped to establish health and sanitation amid the ashes of plague and famine. These men have always realized as you and I can not, what the problem means. They have realized perhaps as we cannot, the debt we owe a kindly and dependent public.

So in considering the common people, let us not lose patience, from which comes clearness, nor faith, from which comes courage. And we need not go one step further unless we concede right here that the common people are honest, as sensible, and as just as we ourselves, seeking as earnestly as we would in their place to rightly solve the vital problems of health and clean living. If we insist that they are less than that, then I shall sacrifice my self respect, and

tax your patience in vain. But admit that they are men of common sense and common honesty, wisely trying to modify an environment which they cannot wholly disregard, guiding and controlling as best they can their own credulous and irresponsible traits of character, oft times compensating error with frankness, and retrieving with patience what they have lost through ignorance. Admit this, and we have placed the public and the profession on the same side of the fence against disease and quackery.

If society, like a machine, were no stronger than the weakest part, I should despair for it. But knowing as you and I do know, that society and sentiment can mend and repair until the whole has strength of the best, I despair not at all.

If this problem will ever be solved, and I firmly believe it will be, though it never has been, it will be solved by those most deeply bound in interest to its cause, by those most deeply bound in honor to its solution. The regular doctors will ever be active in this effort; it is so interwoven in our professional fabric that we could not disentangle it if we would, so bound up in our honorable obligation to the world that we would not if we could. Then let every doctor in his respective community make a just and honest effort to acquaint his people with the objects and aims of the medical profession. If the public could only become acquainted with the profession as you and I know it, they will respect it even as you and I respect it. Because it merits respect, but lacks acquaintance. Let every doctor give a moment of his time to carry on this acquaintance. The skeptic will say of course that this problem will never be solved. Our all wise Creator alone can know, but this you and I do know, it will never be solved with less than the tolerant patient sympathy of the public; with less than the knowledge that the blood flows in their veins is our blood. For we realize to-day as never before that no great advancement or development can be accomplished in this wonderful country of ours without the stamp of public approval.

Before the lofty ideals of medicine can be

realized, we shall have to enlist the strong arms of the public, and enjoy the strength of their approving sympathy. Let us see to it that professional prejudice and public misunderstanding do not cause estrangement, let nothing disturb our loyalty to the public and its needs; let nothing mitigate our consecration to its service.

For well do we realize that all great and worthy accomplishments have been borne forward upon the on-rolling tide of public sentiment. That mighty element of force which can carry forward to completion the most worthy efforts of medical endeavor.

It is clearly the individual duty of every member of the medical profession to do his personal bit by a constant endeavor to gather the public into an alliance of intelligence and responsibility, an alliance that welcomes the responsible and intelligent of every class. And in this atmosphere of uttermost justice and abiding friendship we can ask of our people: First, Patience, out of which alone, can come perfect work; Second, Confidence, in which alone, can they judge fairly; Third, Sympathy, in which alone, they can help us best.

By this alliance confirmed in public judgment, and justified by the progress already made, we hope to progress slowly but surely along the journey. For believe me my brethren the future of medicine rests not upon the knees of the Gods, but upon the sturdy shoulders of an enlightened and sympathetic public.

R

Visceral Syphilis.

H. E. MARCHBANKS, A. B., M. D., PITTSBURG, KANS.

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

Until the introduction of the Wassermann test, few conditions of the peritoneal cavity were thought of as due to syphilis. Since then, however, surgeons as well as internists have been paying more attention to pathology in the abdomen due to the spirochete, and have come to the conclusion that where obscure abdominal symptoms exist, a Wassermann should be made.

I wish to give the histories of three cases

of syphilis of the abdominal viscera which will illustrate the symptoms of these individuals and the findings from the same.

Case I. Mrs. N. D., White, aged 32 years, a housewife, mother of two children living and well. Mother, father and brother all living and well. Patient came to my office May 1, 1919, complaining of pain and tenderness in region of stomach, with history of acute attacks of pain followed by diarrhea and vomiting. She thinks that her pain has no relation to her eating. Has lost weight rapidly in last four or five months, but does not know how much, perhaps thirty pounds, she said. She complained also of nervousness and sleeplessness.

On examination I found a poorly nourished woman of apparently 45 years of age (her age was 32 years). She was more or less anemic, with a very tired expression on her face. Tonsils were enlarged, teeth in very bad condition. Heart and lungs negative. The abdominal examination revealed a mass in the epigastrium about 10 cm. in diameter which could be seen as well as palpated. This mass was extremely tender and moveable to a very limited degree. The rest of the examination was negative except a general enlargement of all the glands and exaggerated reflexes.

Laboratory findings: Haemoglobin 80%; red cells 4,800,000, white 8,400, with normal differential; urine negative except for few pus cells. Stomach analysis with Ewalt test breakfast showed a total of 38, free HCl of 3 or less with about 500 c.c. of filtrate returned. No blood. Faeces after lavage and 3 days milk diet revealed no blood. Due to x-ray man being absent at the time, no pictures were taken, which fact I have greatly regretted since the case has proven so interesting. Wassermann $4 \div \div \div \div$

She told me that she had seen several doctors the day I saw her, and they had all made a diagnosis of inoperable cancer. She said, however, that they had all just looked at and felt of the mass and made their diagnosis at once. I thought however that they were about half right when I saw the mass, but the age of the patient gave me a

hunch, so I delayed my diagnosis until I got the return from the blood, which was $4 \div \div \div \div$. I was still afraid that I might be wrong, so didn't promise much in the way or help, since in only 15% of cases of syphilis of the stomach is a tumor palpable, while in gastric carcinoma 50% to 60% are palpable. The lowness or nearly absence of free HCl is a distinctive feature in this case, however, because in 80% of all gastric syphilitic cases there is an absence of free HCl, while in 48% of gastric carcinomas free HCl is present although usually subnormal. In benign tumors or ulcers there is usually a hyperacidity. The rapid growth also speaks against Brinton's disease. However, gastric carcinoma seems the most probable diagnosis except that the patient was rather young, until the positive Wassermann was obtained and the marked improvement under specific treatment cleared the diagnosis.

The treatment was as follows: Two weekly intravenous injections of salvarsan with mercury injections and potassium iodide were given and the mass had almost disappeared, and the tenderness was all gone. After the first two intravenous injections I was, for some reason, no longer able to get in the vein, and after numerous attempts on different days I gave it up, and have depended on mercury and potassium iodide. I have watched her veins every two weeks and have made numerous attempts to get in, but have had no luck. However, at this time they are looking better, and I hope to give her more salvarsan in June. During this time I have had her on the various salts of mercury with potassium iodide; had her teeth cleaned up, and she feels and looks fine. She doesn't tolerate potassium iodide well, so I have to give her two or three weeks rest occasionally in order for her to pick up weight, and then start on it again. I use chiefly equal parts of potassium iodide and syrup sarsaparilla, starting with 20 drops of the mixture t. i. d. in plenty of water; increase then to 60 drops. I use the mercury ointment in courses of 20 injections, giving a few days between courses until 2 or 3 courses are taken, and then give injections

of succinimide, salicylate or bichloride, and in the interval give protiodide pills or mercury with chalk or a biniodide mixture with potassium iodide.

I always give a rest of from 7 to 28 days to let the stomach rest and to nourish the patient. In the meantime I let them have a little I. Q. & S. or petroleum emulsion or even go without anything. I continue along this line for at least 3 years with an occasional course of salvarsan of 4 or 5 doses, but never more than 2 courses in the year.

Case II. Mrs. J. L., a housewife, 48 years old, about 5 ft. 8 inches tall, weighing 89 pounds, came to me November 11, 1919, complaining of the "belches," loss of weight, epigastric pain and diarrhea. She looked more like a female shadow than a real woman, for some one had told her to get rid of her teeth and she would get fat, so the teeth being out added to the picture. Some one else had given her twelve different fat producing medicines, so when she came to my office it was under protest, for she knew I couldn't help her either. I agreed with her, and was just a little sorry that my friends had ever mentioned me to her.

She had been losing weight for about a year, and had been belching at frequent intervals for the greater part of the time. The diarrhea had been getting progressively worse for the last month, but had bothered her some for over 6 months. The thing, however, that bothered her the most was weakness.

Her past history was negative, as well as her family history. Both she and her husband denied venereal infection.

Physical Examination: No teeth, marked contraction of muscles of right side of mouth, due to scar tissue. Tonsils not remarkable; nose and throat negative; eyes not remarkable. Heart and lungs negative except for slight systolic murmur at apex. Blood pressure, systolic 92, diastolic 74. Abdomen thin walled and flat, but otherwise negative; slight tenderness in epigastrium on deep pressure, but no mass palpable.

X-ray showed the stomach emptying very slowly with a 6-hour retention.

Stomach analysis showed a total acidity of 23 with free HCl of 5. No blood was found. Only small amount of contents recovered. Feces negative. Urine negative, Haemoglobin 85, red cell count 4,700,000, white count 6,200 with normal differential. Blood Wassermann $4 \div \div \div \div$.

Because of her general run-down condition I was very slow about telling her what could be done, for she didn't look good. I couldn't account for the emaciation being due to syphilis. However, with the other findings negative, I could find nothing else to account for it.

I therefore went slowly with treatment, gave her some intestinal antiseptics, also some diluted acids with pepsin. I began her on small doses of potassium iodide and mercury with chalk. She improved slowly from the start, but on account of the contraction of her cheek, she had a very annoying time getting her plates made, so has not been able to chew her food as she should. On April 18th I gave her the first salvarsan; before this I hesitated to give it to her because of the extreme weakness and her general run-down condition. Have given her no more due to the fact that she was called to her son's bedside who had a fracture of the skull at time second treatment was due. However, she is greatly improved, and I have every reason to believe that she will still improve under specific therapy.

Case III. Mrs. S. S., housewife, 38 years old, weighing 138 pounds, mother of 2 children, both of whom gave a positive Wassermann reaction. I saw her in January, 1918, at which time she was complaining of "enlarged liver." She had complained of liver trouble for a number of years, but would get relief from calomel. Family history was negative, and both she and her husband denied venereal infection. Physical examination was negative other than the palpable liver and increased patella reflexes. Wassermann $4 \div \div \div \div$. Several small doses of diarsenol were given at weekly

intervals with potassium iodide and mercury in the mean time. Her condition was much improved, and the liver no longer palpable when I left for the Army in April, and when I returned I learned that she had taken up Christian Science. This patient was brought to me by another doctor for salvarsan treatment. He gave me the history as he remembered it, for which reason it is quite incomplete.

Discussion: These cases are interesting for several reasons. In the first place the two that are still under treatment are in perfect health so far as their gastric symptoms are concerned, due to specific treatment. I have observed only twenty-two cases in my work that I can class under this head, but in every case there has been marked gastric improvement as well as general improvement under specific treatment.

The chemistry of the stomach has been interesting. In a large per cent of my cases the free HCl. has been absent, and in every case it has been subnormal. After treatment the acidity is increased, but as to the pathological changes I am not prepared to say.

The work of Eusterman and Warthin on the subject has given the impression that visceral syphilis is a patchy or diffuse progressive inflammatory process. Eusterman reported from resected portion of the stomach in advanced cases a marked fibrosis of the thickened muscularis and hypertrophied submucosa with atrophy of the mucous membrane.

Conclusions:

1. Tumors in the epigastric region should not be diagnosed until a blood Wassermann has been made.
2. Visceral syphilis is found most frequently in the third decade. A negative history does not rule it out.
3. Complete physical examination is essential for the diagnosis of obscure abdominal symptoms, and such examination is not complete without a Wassermann.

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R

Surgical Infections of the Kidney

BY R. W. JAMES, M. D., WINFIELD

Read at the Annual Meeting of the Kansas Medical Society at Hutchinson, May 5, 1920

Infections, localized within the kidney, are of sufficient importance and frequency to demand consideration in the diagnosis of any intra-abdominal inflammatory condition. In frequency of occurrence renal infections rank below that of the appendix, gall bladder and uterine adnexa. From the standpoint of diagnostic skill required and the number of errors possible the consideration of this subject may easily be of first importance.

From the standpoint of physiology and anatomy the following points are mentioned as having a bearing on our subject. First, that the entire blood of the body passes through the kidneys every eight minutes showing the possibilities for hematogenous infection. Second, that the lymphatic supply of the kidney is very large, accounting for the severe chills, high fever and other toxic symptoms usually present in all infections of this organ. Third, that the kidneys have a peritoneal surface and are in intimate relation with the colon and duodenum, explaining certain accidents which may occur in nephrectomy. Fourth, that either kidney may be found in any part of the abdominal cavity, either singly or fused together. Fifth, that one sound kidney may do the work of two paving the way for nephrectomy in unilateral diseases.

Ten years ago it was taught that the great majority of renal infections originated in the lower urinary tract and reached the kidney by way of the ureter. Today we know that this seldom or never occurs. The kidney, as the great eliminative organ of the body, handles not only the products of

metabolism but those of any infection occurring anywhere within the body including both toxins and bacteria. Bacteria we now know are constantly occurring within the blood stream whether due to the more severe infections, as tuberculosis, typhoid or pneumonia or those apparently more trivial as in tonsilitis, enteritis or apical tooth infections. Under normal conditions the kidney eliminates bacteria without itself being affected. If, however, the number of bacteria is the blood stream is excessively large or if the kidney be handicapped by abnormal conditions, it may itself yield to infection. The most important of these predisposing causes are; (1) stone anywhere within the kidney; (2) obstruction in the lower urinary tract causing back pressure within the kidney, such as enlarged prostate, tumor or the pregnant uterus; (3) traumatism of the kidney and (4) misplaced and floating kidneys. The bacteria involved are in order of frequency, colon bacillus, staphylococcus, streptococcus, and tubercle bacillus. The infection is most often mixed and in all chronic cases the colon bacillus will be found predominating.

The pathology of this condition will be necessarily varied, depending upon predisposing cause and the infective agent. Mild cases will show only a simple pyelitis with inflammatory changes within the parenchyma. Advanced cases will show more or less complete destruction of the kidney and if the ureter be obstructed the pus sac remaining may contain one or more liters of broken down debris. The acute septic kidney will be much enlarged, adherent and congested and within the cortex will be multiple pinpoint size abscesses.

The symptoms will vary with the pathology present. They may be classified as local and general. Fever and symptoms of intoxication are usually severe. The chills simulate in severity those of malaria and pneumonia and the fever may be either of the continuous or the septic type. If both kidneys are involved uraemic symptoms are usually present. The leucocyte count runs high and will usually be above fifteen thousand. In old and chronic

cases apparently the lymphatics become blocked and we may have large pyonephrotic kidneys with scarcely a symptom. One such case we observed over a period of eight months, throughout a pregnancy, with only an occasional referred pain in the region of the sound kidney, the nephrectomy, performed later, showed several stones, some five hundred centimeters of pus and only a shell of a kidney remaining. The local symptoms are pain, tenderness and enlargement of the affected kidney, pus and albumen in the urine, and bladder symptoms. If the ureter is closed the urine may be clear or there may be an intermittent pyuria where the ureter is closed for variable periods of time. Bladder symptoms are usually present and are most severe in tubercular infections. In this condition they usually dominate the field and are responsible for a great deal of futile bladder treatment and consequent delay in diagnosing the disease. To a lesser extent may this be true in chronic pus infections in which the constant down pouring of acid bacteria laden urine often sets up a most intractable cystitis not to be cured until the causal condition has been removed.

W. J. Mayo, in commenting upon the low mortality in a series of kidney operations, remarked that this was not due to any unusual skill in operating but to the care and completeness with which each case was diagnosed preparatory to operation. The diagnosis of an infected kidney should if possible include the following: First, the localization and type of the infection; second, its etiology especially as to its predisposing cause; third, the functional capacity of each kidney. By means of the x-rays, ureteral catheter and the laboratory examination of the separated urines, these facts can usually be ascertained with exactness and we may operate or not with intelligence and safety, knowing beforehand what we may do and what we may expect to find. While this condition is one in which the laboratory diagnosis is of great importance it is important that the physical examination be complete. In males with deep chests it is not uncommon that even a large pyonephrosis

may not be palpable on bimanual examination. In these cases careful pereussion over the back with outline of the areas of dulness on each side may assist greatly in demonstrating an enlarged kidney. A careful search for possible focal infection should be made, including the condition of the alimentary tract, teeth and tonsils. The intelligent treatment of an infected kidney depends entirely upon our diagnosis and for this reason should be thorough and complete.

The treatment of renal infection may be roughly divided into that of the acute cases and those which have become chronic. It may be further divided into that which is palliative and that which is radical. In the acute case of a mild type the discovery and removal of the cause with appropriate medical treatment will in the great majority of cases effect a cure. In the acute septic kidney with severe toxic symptoms surgical intervention will save many cases. Here the question at once arises as to where a palliative or radical operation will be indicated and this cannot usually be determined until the pathology present can be determined by actual inspection. Fortunately except in cases of general septicemia, the trouble is usually unilateral. If in the judgment of the operator the condition is of such severity as to imperil the life of the patient an exploratory operation should be performed. If it is found that there is no marked destruction of cortex a nephrotomy should be performed and the kidney drained. If it would appear that the loss of kidney substance is extreme a radical removal of the entire kidney should be done. It is apparent that what is done will depend largely upon the judgment of the operator. We have recently observed two cases illustrating this type of the disease.

Mrs. L. age 44, married, four children, previous and family history negative. Had been treated for two weeks for influenza. This patient ran a high temperature with occasional chills. There was only a moderate number of pus cells in the urine and no albumen. The kidney on right side was palpable, moderately enlarged and tender. X-

ray was negative and the urine from the left kidney was clear. This case was observed for a week and as she was becoming worse operation was advised. A large kidney was found, greatly congested and adherent. The pelvis contained no free pus, the cortex was studied with many small abscesses. A tube was fastened in the pelvis and several of the larger abscesses incised, the kidney replaced. Recovery was surprisingly rapid, the temperature dropping from 105 to normal in 48 hours. The drainage closed in four weeks and the urine was clear of pus in about eight weeks. Six months later this patient had a chill, fever and pus in the urine. The condition however cleared up under urinary antiseptic in a week and she has since had normal health.

Mrs. S. aged 22, married, one child. This patient was also treated for influenza for a week and then sent in for drainage of a supposed pelvic abscess. This patient was extremely sick, running a continuous temperature from 104 to 105. When first seen there was no enlargement of either kidney and only a little pus in the urine. Most of the pain was referred to the left pelvis although there was an acutely tender spot just over the left kidney posteriorly. This case was under observation three days, at the end of this time the left kidney became palpable and tender. No urine could be obtained from the left ureter, that from the right gave from five to six cells to the one sixth field not centrifuged. The x-ray showed nothing. There was some swelling and tenderness in the left pelvis posteriorly in the region of the ureter. The case was very puzzling until the left kidney became palpable. On exploration the pelvis was found distended with pus, the kidney greatly enlarged and congested. The lower third was very dark appearing almost necrotic. This kidney was removed and the patient made a rapid recovery leaving the hospital in sixteen days although a little drainage persisted for two months. The microscopic examination of sections from this kidney showed an entire destruction of the glomeruli and tubules and certainly justified the nephrectomy.

The treatment of chronic suppurative conditions within the kidney is largely surgical. Irrigation and lavage of the pelvis is difficult and unsatisfactory and should be reserved for cases in which both kidneys are affected. If the ureter is open and there are no systemic symptoms it may be permissible to keep these cases under observation and medical treatment. If the ureter be closed the indication for surgery is absolute. The question of the operation to be performed is dependent upon the condition of the two kidneys and the judgment of the operator with the tendency more and more toward nephrectomy. In this respect there is some parallel to the surgical treatment of gall bladder disease with the difference that the loss of a kidney is more serious than that of a gall bladder. In case of doubt it is permissible to drain the kidney with the possibility of a later nephrectomy. This course has many disadvantages as the patient is almost sure to have prolonged suppuration with a strong liability of a secondary operation. A nephrectomy following a nephrotomy is always difficult because of the inflammatory swelling and adhesion which makes the delivery of the kidney dangerous with risk of rupture of the pedicle, secondary haemorrhage and injury of the duodenum on the left side, usually a fatal complication.

Unilateral tuberculosis of the kidney is according to all authorities an absolute indication for nephrectomy. Except for the milliary type, renal tuberculosis is always primarily unilateral and it is up to the medical profession to diagnose these cases before both kidneys are infected. Drainage or a partial resection should never be undertaken as the progress of the disease will inevitably become accelerated. With one kidney markedly involved and only a beginning infection in the other some men are advocating a nephrectomy in the hope that the compensatory hypertrophy may effect a cure. The question is one requiring good judgment and must take into consideration the general condition of the patient and the involvement of the other organs.

Patients who have had operative treat-

ment should have competent medical supervision for some time after leaving the hospital. Drainage cases should have regular examination of the urine for at least two years and longer if indicated. It is important that all focal infections should be prevented and any present cleared up.

Cases which have had a nephrectomy, in our experience usually show a Roundtree elimination test of around 75% of normal. They should be shielded from anything which increases the eliminative function such as pregnancy, overwork and exposure.

In conclusion we would urge that the diagnosis be as complete as possible and the surgical treatment be as radical as the conditions present will permit.

R

Medicine's Economic Future

BY THEODORE BACHMEISTER, M. D., CHICAGO

Read by Dr. L. F. Quantius before the McPherson County Society, Sept. 14

By way of introduction, let me state that the thoughts, opinions, and suggestions voiced herein represent a radical departure from the author's one-time idea of medical economics.

I was of those who believed the physician had nothing to do except practice medicine. I have come to believe that he must now look sharp to his economic standing or soon find himself denied the privilege of continuing his present honest efforts to cure the sick. If some of the statements about to be made sound radical, or clash harshly upon your ears, I beg your indulgence and suggest their very careful weighing before you dispute them.

We all realize that a change has, of late years, come over the economic status of medicine. The attitude of the public toward the profession has altered. We no longer inspire the full confidence of the public, occupy the position of splendid isolation we once occupied, nor enjoy the immunity to nagging and hampering legislation we once enjoyed. As individuals and as a profession, we find ourselves increasingly menaced by mischievous legislation and burdensome economic conditions placed upon us by interests wholly outside our own ranks.

The great majority of physicians have been and are quite too busy to give thought to these economic changes that are threatening us. We are so busy striving to alleviate the sufferings of our fellow men that we find no time to rest from and discover what that world is planning to do to us in reward for our efforts.

The direct result of our close confining labors is that we fail to keep abreast of the times. We do not note the great shifts that are taking place in the social, economic, and political world, nor sense the tremendous bearing that these changes have upon us and our profession. A few, within the past five years, have come to realize that danger threatens us from without. It is high time that the entire medical world shake itself from its lethargy and rouse itself to a full knowledge of the shameless manner in which it is being exploited by big-business, organized labor, and scheming politicians. While we have labored and sweat for the good of mankind, these interests have not been idle! Review the situation today and you find that the one time revered and respected, the ancient and honorable profession has been made the "goat," the "easy mark" by these, our friends. It has become the "foot ball" of politicians, the cheapest of "cheap labor" for big business, the most servile of "hired men" for the great insurance companies, and now bids fair to enter into serfdom as vassal of the state!

Do I overstate the case? Are some of you shocked at the classification given you? Review recent happenings in the business and political world affecting medicine and see. How do the great insurance companies treat you in the matter of compensation for services rendered? Who names the fee? Are you master or slave? Again, in the matter of "contract doctors" or industrial physicians, who specifies the wages, the doctor or big business? Or, when the state wants physicians, do these physicians have anything to say as to compensation? Without discussing the merits or demerits of medical compensation laws, contract practice or state medicine, I merely make the point that in

none of these instances does the employed physician have the least voice in the valuation of his services. Can you name any other profession, trade, or branch of labor which supinely submits to such treatment?

However, this is but the beginning of our subjugation. Unsatisfactory as they are and reflecting, as they do, upon the business acumen of the profession and its ability to take care of itself, these abuses pale into insignificance in the light of the greater danger that now immediately menaces us. If there are physicians and surgeons who are content to work at another man's price, they are welcome to do so; if others are satisfied to serve newspapers, insurance companies, or factories at the salaries offered, that is their business and you and I are not vitally affected; if the great insurance companies can find men who will serve them at their "cut priees," you and I can let them do so—we in the meantime refusing all emergency calls and losing that class of business while saving our self-respect. Over and above all these and completely outclassing them in perniciousness looms that greatest of all menaces to the medical profession—compulsory health insurance.

You, who are too busy to keep in touch with the situation, you, who, in ignorance and innocence, plod along in toil, blissfully believing all the world to be as honest as yourself, not suspecting that any one would seek to work an injustice upon you—oh, you trustful, peaceful toilers—lift your heads and your eyes from your work a moment and see what is being planned for you by your political friends!

Are you thinking of compulsory health insurance as some intangible fancy of some dreamer's brain—or as something tried and found wanting in Germany and condemned in far-off England—something that could never gain a foot-hold in this land of liberty and justice? Listen to me. Compulsory health insurance is at your very door! New York and Ohio have barely escaped it—and only for the present—and at this moment powerful interests are at work preparing for its introduction into Illinois. The labor

people will benefit and they are boosting it. The politicians need some new issue and compulsory health insurance offers itself as a great drag-net for votes. Wake up, men of medicine—bestir yourselves before it is too late. Get into action and put yourselves into shape to have a hand in this great thing!

Without commenting upon the merits of compulsory health insurance, *per se*, I call your attention to the fact that the physician has not been consulted as to his wish in the matter. The politicians and the labor unions have decided for us. Our fate is settled before we know it is under discussion! You and I are merely asked to pay the increased taxes and render the services required of us at paupers' prices! And, unless the medical profession breaks away from all precedent, it will meekly accept whatever conditions of servitude the other parties to this deal decide to impose upon it. So easy are we of exploitation!

Well, why should they consider us—these generous politicians — these vote-getting statesmen? As a political factor the medical profession amounts to a magnificent cipher! We number ten thousand men in Illinois and are wont to boast of our rich and powerful clientele! Idle boasting! Let me tell you that the "White Wings" who sweep Chicago's streets, with their less than 400 members, have more influence at Springfield than all the noble ten thousand doctors in the state! Why? Again, the just-passed budget of the city of Chicago carries an increase of pay for all employees **except certain of the medical staff**. Why? Why does the profession receive such scant courtesy and consideration from state, city, labor, politicians and big business? Why are we such an utterly negligible quantity in the business, social, economic, and political world—except as servants? The answer is evident. When we have accomplished a complete, compact, workable organization that meets the economic as well as the scientific problems of the profession, then, and then only, will we have a commanding voice and wield some influence.

If now these serious changes in the eco-

nomics of medical practice are coming—and we must admit that contract and industrial practice, compulsory health insurance, and state medicine are all very real possibilities, capable of becoming actualities any day—and if the medical profession is to have a voice in planning its own future, the question arises as to how we are to make ourselves heard.

I submit to you this proposition—in the present day of decadent statesmanship and cheap polities the voice of force is the only voice that secures a hearing in the halls of legislature and a gnarled club is the only instrument capable of getting under the skin or into the skull of the office holder. Until the medical profession cultivates a loud and compelling voice and packs a generous club it will continue to be ignored in the future as it has in the past.

It is high time that a change came over the esprit of our dreams and a new system into our manner of dealing with our talent is devoted to the interests of the profession. Third, the dues of the organization must be such that the work is not hampered or hindered for want of funds. The first step toward an active, efficient organization is sufficient funds. With money we can do anything—without it, nothing!

The physician enjoys the unenviable reputation of being a poor business man. Nowhere do we show this weakness more plainly than in our organizations which, as "going concerns," would appeal to a business man's sense of humor alone. Think of the joke of running a great state or national society on two, three, or five dollars per year! No self respecting sewing circle can run on that amount of money. Go home and ask your wives how much their club dues amount to per year or figure out what you yourself spend annually for clubs, athletic, social, golf, automobile—and then consider that these things are but incidentals—playthings—while your medical society dues represent your investment in the serious matter of your life's work. You expect, and you receive, scientific information and benefit, legal protection and a monthly

journal, all for the niggardly sum of one and one-third cents per day! Small wonder that your poor society fails to measure up to your expectations at times!

Mention has been made of labor union methods. While we have scant sympathy for some of their actions we must credit them for the full protection and material benefits they assure their members. The street-sweepers of Chicago today receive \$6.40 for a day's work of eight hours, as contrasted with the \$1.75 of five years ago. What is the secret of the power and influence of these unions? Just two things—close organization and money. When earning \$2.00 per day the street-sweepers organized a union, paid \$5.00 to join the same, and \$1.00 per month dues—over 2 per cent of their income. Suppose, just for one delirious moment, just for the fraction of one Arabian Night's dream—suppose the members of the Illinois Medical Association contributed dues in similar ratio! Oh, no, we growl at giving up 41 cents per month! What pikers we are—if you will permit me the slang of the street.

And what is the result of our penuriousness?

Labor union methods of organization and procedure are suggested, not for the power this would give us in boosting our fees or increasing the already heavy burden of the sick and ailing. Except for the need of a little equalization of manifestly unjust charges in certain localities, we hold that present day medical fees are quite high enough. The organization of the profession along the lines suggested will be solely for the purpose of self-protection, professional freedom and liberty and self-preservation under the present day economic conditions and, over and above all these, more important than any of them, for the purpose of securing for the medical profession an influential part in the constructive legislation touching matters of public health which is bound to come soon. Whatever the provocation, the physician must never become an obstructionist and, although the primary and immediate cause of our close organization be

self-defense, yet its ultimate object must ever be the physical up-building of our fellow men, and toward that object we must always lend our choice and influence. Every reasonable, constructive enactment in the interest of physical welfare must be supported by and guided by the medical organization.

To recapitulate, briefly; (1), there is more to the practice of medicine than the mere peddling of pills; (2), social medicine is upon us, state medicine is but a step away; (3), health being an essential factor in economies, the practice of medicine must necessarily come more and more closely under legislative control; (4) self-interest and state-interest require that the medical profession have a voice and hand in formulating this legislative control; (5), as now organized, we are absolutely helpless and wholly at the mercy of those interests that would exploit us; (6), in this age of materialism, brute-force alone can serve us, and that force can come to us only through close organization and the expenditure of money; (7), this calls for at least the partial adoption of labor union methods, including reasonable dues and a salaried officialdom whose entire time and energies are devoted to the interests of the profession.

Members of the whole medical profession—are you ready to face the situation as it really is, and save your skins, or are you content to hide your heads in the sands and trust to an overworked providence to protect you from the gathering storm? The decision rests with you.

R

Reminiscences

BY C. C. GODDARD, M. D., LEAVENWORTH

Read before the Northeast Kansas Medical Society, Kansas City, Oct. 28

One day in March of 1873 I walked into the office of Bellevue Hospital Medical College with my heart feeling unduly near my larynx and received from Joe Standish a sealed letter informing me as to the result of my examinations for the degree of Doctor of Medicine. Fear gripped my vitals and to open the thing seemed impossible. Finally Joe said, "Stiffen up, don't be afraid, the

first three words will tell you. They are either, 'I am sorry', or 'I am happy'." So finally I did and as the word "happy" illuminated the page the world seemed very, very much brighter than a few moments before. The thought that I was now through fully possessed me. Little did I understand that instead of being through the battle had not yet begun. That all seems but yesterday so little can we appreciate the passage of time.

I did not then realize that I was upon the threshold of a new and wonderful stage of medical advance; we had, to be sure, already learned through the great Virchow his discoveries in histology, which were but in their infancy and which were destined to put a new phase on the world's knowledge of disease and upset many already accepted ideas. Many new procedures had been inculcated by the various teachers of the day so that when we made our debut as full fledged M.D.'s we could but consider the world as our particular oyster. If at any time in doubt as to the nature of some malady we were called upon to treat, simply look wise and say this is one of those peculiarly masked troubles due to that scourge of mankind, malaria. In surgery, if we were blessed enough to find **laudable pus** following our operations, nothing was left that could be desired. As to union by first intention, that was simply a utopian dream and was not believed by the surgeons of the day as possible; except for very trivial injuries.

During the early seventies the question as to the opening of the abdominal cavity was rampant and had, for a time, few adherents; the bulk of older men contended that it should be discouraged to the utmost. In 1872 while I was attending my first course of lectures with Missouri Medical College I was present at the Academy of Medicine one evening when Dr. Bower had brought in two good sized washtubs containing two ovarian cysts he had that afternoon removed. During the discussion following his talk on the advisability of the operation, Professor Hodgkin of the St. Louis Medical School,

remarked: "I have operated seven times for ovarian cysts and out of that number six white marble slabs show the results I obtained; therefore I am thoroughly convinced that opening of the great abdominal cavity is nothing less than criminal;" upon which Hammer of the Missouri Medical School retorted that "That man Hodgkin merely displays his ignorance and well known inability, he is simply a fool and always was a fool."

Fractions imminent—and was only avoided by several men getting in between the beligerents. So we see that the pros and cons were as marked as in a later decade was the question of appendicitis; as most of you remember. Within a year Dunlap of Ohio performed successfully some 33 removals without a casualty and with improved technique the operation has become very common with removals of cysts and pretty much every thing else God gave the woman; except the intestines and even they are not always left intact. When you come to realize that these operations were performed before the asepsis of today, they were very remarkable even if many of them had their **laudable pus** as a friend.

In major operations the surgeon that was the ideal of all medical students was he who could wield the longest knife and make a complete circular incision of thigh or arm with one sweep of the blade without stopping. He was the wonder man.

To bleed or not to bleed, that was the question. The older men were very loathe to forego the letting of blood. Even Flint in a lecture to our class of '73, claimed that in a case of lobar pneumonia, occurring in a robust, full blooded, young man a good letting of blood would be, in his opinion, ideal practice. Of course in a short time the bleeding and leeching became obsolete and it no longer paid the druggist to keep up his stock of leeches. As is always the case, the reformers went to the extreme and in following years of instruction the subject of bleeding was taboo—still there are cases, undoubtedly, where a free letting of blood would be a very good thing, not only for the patient but for the doctor as well.

During the early seventies Flint (Junior) upset the old teaching of Dalton and others as to the function of the cerebellum presiding over the animal passions and demonstrated fully that it controlled coordination of all muscle movement, which was a good stride in the right direction.

Thomas and Simms gave a great impetus in improved treatment of diseases of woman. Simms taught and practiced injection of semen inside the uterus and while court physician in France was successful in impregnating the Empress Eugenie and gave her the pleasure of becoming a mother, where all others had failed.

The Brown-Sequard bobs up with the claim to have found the key to the prolongation of life and virility by injections of goat serum—so you see history repeats itself as per the man in Chicago who with his herd of goats was compelled to seek more room for his increasing patronage.

Soon the craze for oophorectomy came on as a great cure of all imaginable disorders and some of the large hospitals had such quantities that they even contemplated selling their product to the farmer as fertilizer.

In the late seventies and early eighties Lister convinced the world as to the value and necessity of antisepsis. This gave the long looked for and hoped for justification for opening any and all cavities of the body with impunity. So the surgeon's chance came to reap the rich reward of fame as well as riches—fictitious values were placed on all operations and the golden grain flowed at last and is still flowing in all large cities.

In the later eighties Dwyer devised the intubator for diphtheria of the larynx. The question was debated at that time as to whether a membrane in the larynx was or was not diphtheria. If not then a tracheotomy, or later intubation, would give the patient a chance for life; if diphtheritic, intubation might prolong life—at present there is no valid question as to its being diphtheritic.

Then, thank God, come antitoxin to relieve the world of one of its greatest plagues. Little can anyone of the present generation

realize what diphtheria meant before the advent of anti-toxin. In 1866-7 I have seen whole families pass away within a week—it was fully the equal of influenza in its harvest of deaths.

During this decade came to our ancient and bewildered minds a new and mysterious malady, which opened up a new field for the ready, willing, capable surgeon. It became so popular that even the children had it pat and while some of them were coasting down a rather good hill one little chap received a bump that rendered him unconscious; "Let's take him up to the corner to Dr. S' office," "Oh no," cried one little girl, "if you do they will operate on him for appendicitis."

Before appendical troubles were recognized as such there was recorded many a death of rapid typhoid with rupture of bowel, and many an aborted typhoid was simply a mild attack of appendicitis.

And then came to our overburdened mentalities the discovery of the bacillus of tuberculosis and the realization that it was rather more curable than an incurable malady—and so on and so on up to the present day we behold the steady progress of medicine and surgery until we have realized that one small head can not contain them all, so we have been compelled to specialize in order to do the most good for the greatest number.

Now we bump up against the internist, surgeons of different regions, eye, ear, nose, throat, et cetera, as we visit the office buildings. In ye olden times we were not allowed to display more than Doctor So and So, or; So and So, M.D. Some of the older men even frowned at Physician and Surgeon claiming it was up to the public to discover who was who.

The old Hippocratic Oath was administered with great solemnity to the candidate before the degree was conferred, and our young feet were admonished to go very carefully and avoid the many temptations and pitfalls that were before us.

Possibly some forty or fifty years hence many of the present young men in the profession will look back on this present era

and wonder how in the world the human race stood for our ignorance; but,
 "I have shut the door on yesterday
 And thrown the key away;
 Tomorrow has no fears for me
 Since I have found today."

R

Indirect Paracentesis for Abdominal Dropsey

BY V. E. LAWRENCE, M. D., OTTAWA, KANSAS

(Reprinted from American Journal of Clinical Medicine)

Some six months ago, a patient, aged fifty-five years, suffering with valvular disease of the heart and with advanced interstitial nephritis, developed general dropsy. The bowels and kidneys being unable to eliminate the abdominal effusion, paracentesis became necessary.

Believing that the patient would survive some three or four months, I hesitated to puncture the abdomen because of the probable necessity of frequent repetition of the procedure.

After some consideration of the matter, although without a known precedent, I decided to puncture a large hydrocele, upon the theory that the abdominal liquid might filter through the tissues between the abdominal and scrotal cavities and thus relieve the patient of the distress of abdominal puncture, by the comparatively painless, safe and easy tapping of the hydrocele.

This was done, with the result that within a few hours, slightly more than 4 gallons of liquid, by measurement, flowed through the scrotal cannula, virtually all the abdominal ascites and much of the edema of the legs being removed.

A soft-rubber catheter was attached to the cannula as a means of conducting the liquid to a one-gallon receptacle.

The procedure was repeated some three weeks later, when 3 gallons were discharged. Thereafter, however, puncture of the hydrocele failed to remove the ascitic fluid and, during the last month of his life, some three months after the first scrotal paracentesis, it became necessary to puncture the abdomen.

The cause of this was doubtless due to the fact that the debris contained in the

abdominal liquid so occluded the tissues as to prevent further filtration into the scrotal cavity.

It should be stated that the patient had no scrotal or other form of the hernia. The former would form a canal between the abdominal and scrotal cavities.

Through correspondence with reliable surgical authority I am informed that, so far as known, there is no other similar case on record.

R

The Treatment of Shock

That the surgeon has in Adrenalin a dependable means of combating shock has been known to the profession for a number of years. As long as 1909 Mummery and Symes announced their observations on the effects of Adrenalin upon the blood pressure and recommended its use by the slow and continuous injection of a very weak solution into a peripheral vein. They also found that the action of Adrenalin is enhanced by the coincidental administration of pituitrin, this procedure producing a more marked effect in shocked animals than in normal subjects.

In our advertising section, under the title "Adrenalin in Medicine," will be found a brief review of the plan of treating shock with highly diluted solutions of Adrenalin Chloride, by intravenous infusion and by "centripetal arterial transfusion," after the method of Crile.

This little essay is the third of a series of concise and informative papers published in this rather unconventional form by Parke, Davis & Co. We have no hesitation in commending these meritorious articles to the consideration of our readers.

R

Chaulmoogra Oil In Leprosy

Continued trials made at the leprosy investigation station of the U. S. Public Health Service and the Kalihi Hospital at Hawaii seem to justify more than ever the statement that chaulmoogra oil contains one or more agents that exert a marked therapeutic action in many cases of leprosy. The intramuscular injection of the soluble ethyl esters of the fatty acids from chaulmoogra oil usually leads to a rapid improvement in the clinical symptoms of leprosy. The ethyl esters of iodin addition compounds of the unsaturated fatty acids in chaulmoogra oil have also been used. There is no experimental proof that this addition of iodin causes any increase in the effectiveness of the material used (Jour. A. M. A., Oct. 16, 1920, page 1071).

BELL MEMORIAL HOSPITAL CLINICS**Clinic of Dr. C. B. Francisco, Orthopaedic
Surgery****SARCOMA OF THE FEMUR**

(Beginning in the external condyle)

I am showing you this case in order to impress you with the fact that all affections of the knee joint are not tubercular, syphilitic or infectious. It is a good plan for you to see one of the rarer conditions of joint involvement occasionally so that you may keep in mind all the possibilities and therefore give an intelligent consideration to the cases that you will come in contact with when you begin the practice of your profession. You will never diagnose a condition unless it occurs to you to consider it, no matter how obvious it may be.

This young lady is 25 years of age; foreign born, with a good family history and a negative past history. The history of her present condition is as follows:

In September, 1919 fell at Union Station, injuring left knee, but soreness disappeared in a few days and had no discomfort until latter part of December when she noticed pain without soreness. In January and February had other attacks of pain and in March fell on the floor and struck the left knee against a sharp edge of a box. After this last injury pain was practically continuous, but not severe enough to require her being off her feet. In May her tonsils were removed as they were badly diseased, but her knee did not improve and she lost the power to raise her foot with the knee extended.

Wassermann:—negative as were the blood and urine.

On June 1st an X-ray was taken which showed a cavity in the external condyle that had broken through the cortex. Later in June, the skin was incised and this cavity found to contain a hemorrhagic tumor mass.

Pathologic Report:—Small round cell sarcoma. The next day 50 mg of radium was introduced into the cavity and allowed to remain for 24 hours. No reaction was noted.

Two weeks later it remained for 48 hours. Large doses of X-ray were given at frequent intervals for several weeks. Pain continued and the process advanced and the tissues around the knee began to infiltrate so that amputation was advised and consented to.

This character of the tumor should be considered. The pathological report is small round cell sarcoma, which is known as one of the very malignant types. The spindle cell, and the mixed cell type; that is, small cells and spindle cells, are also very malignant, so that when you are dealing with such a tumor you must remember that they are very prone to metastasize. There is one other type, the so-called giant cell sarcoma which is considered by Dr. Bloodgood as not being malignant in that it does not metastasize. Although Dr. Coley states that he has observed 40 cases of giant cell sarcoma and that 8 of these cases died from metastases. However, the point for you to know is that the treatment and prognosis is different in the giant cell tumors. In these cases you resort to conservative measures such as resection or curretting and the prognosis is good. In the other types, the small cell and spindle or mixed cell tumors, you should advise radical procedures, if the location of the tumor will permit of operative procedure, and the use of X-ray and radium. It has not been demonstrated that radium or X-ray will cure these cases but they often relieve the pain, and apparently retard the process for a time. In certain cases it is not advisable, for instance when the ilium is involved, to explore the tumor for the sake of getting a section to determine the character of it, but where the tumor is accessible it is generally believed that exploring it does not tend to hasten metastases and it is of sufficient value to justify the procedure.

The prognosis in the malignant type is always grave. Usually these cases die of metastases of the lung within 3 years. Dr. Coley's toxin of erysipelas and bacillus prodigiosus was thought a few years ago to offer some hope in a certain percent of these cases, and he has reported a few cases

that are alive for some years after the use of the toxins, but most observers have been rather inclined to conclude that it is of no value. The truth is, there is nothing that can be relied upon to prevent metastases in the malignant type of bone sarcoma. However, one should begin as soon as the diagnosis is made to combat the process by the known methods such as amputations, X-ray and radium applications, for occasionally the process is controlled by these measures.

This case is a typical one and is characterized by presenting the usual symptoms, summarized as follows: Usual age; history of an injury; intermittent pain; loss of function; no tenderness; and definite X-ray findings. These tumors may involve the medullary cavity or the periosteum. You should remember to always consider the question of sarcoma in an obscure case of bone or joint involvement.

Clinic of Dr. P. T. Bohan, Bell Memorial Hospital

A case of myxedema, of 15 years duration, showing improvement in clinical symptoms and restoration of normal metabolic rate on thyroid treatment.



BEFORE TAKING

This patient was brought to the hospital Aug. 11th, 1920, on account of sores on the left arm due to an injury in February.

The important features in the history and the physical findings are as follows: Mrs. H., widow, mother of 10 children. She had menorrhagia for 7 years before the menopause, which occurred at the age of 52. She has had no previous illness of any consequence. She never had a goiter. The present trouble apparently began at the time of the menopause, 15 years ago. Her son states that immediately after the menopause she began to be weak and apathetic, and had spells of drowsiness and lapses of memory lasting two or three days. About ten years ago the face began to swell and in a short time the whole body became swollen. This swelling has neither increased nor decreased to any great extent since the beginning. From 1915 to 1918 she was confined to bed on account of weakness and took treatment for Bright's disease. She never had headache or any pain. She never sweats and feels chilly most of the time. The appetite has been fair; the bowels constipated. She has been able to feed herself most of the time, but, for several years, usually had to have assistance in putting on her clothes.



AFTER TAKING

On examination, the important features are the things that you can see. Examination of the chest and of the abdomen reveals nothing abnormal. The reflexes are present, but inactive. In this case, as in most cases of endocrine disorders, the most important findings are on the surface of the body. I call your attention to this generalized edema, which, while not marked, is plainly obvious. This is a solid edema which does not pit on pressure and, in this respect, differs from the edema of Bright's disease, heart disease or in other conditions in which there is an accumulation of water in the tissues. I call you attention further to the condition of the skin, which is everywhere dry and scaly, but particularly to that on the hands and arms, where it is discolored, fissured and very badly wrinkled. The hair is dry and harsh and quite thin, especially in the temporal regions where she is almost bald. The hair in the eyebrows is also quite thin and harsh. The puffiness under the eyes, the elevated eyebrows, and the swollen cheeks, associated with a listless facial expression make a picture that is rather peculiar. The voice is husky and the speech slow and monotonous. Her memory is very poor; she doesn't know whether she is 50 or 70 years old, nor does she know the number of children she has. Although she looks drowsy and apathetic, she is always pleasant and there are no melancholic tendencies. An interesting feature of her disposition is that she persistently refuses to recognize me as her doctor and says that she will take orders only from Dr. Hastings, the interne. The thyroid gland can be neither seen nor felt. The blood examination revealed a secondary type of anaemia—hemoglobin 45%, red cells—3,400,000—differential count about normal. On repeated examinations the urine has been normal. In about 50% of these cases there has been albumin in the urine, which, associated with the edema, can easily lead to the mistaken diagnosis of nephritis. The temperature has ranged from 95 to 98, and the pulse rate 54 to 68. The blood pressure on admittance was 160 over 90. Analysis

of the stomach contents showed achylia gastrica.

DISCUSSION:

The history of an illness of 15 years duration, the chief symptoms being mental apathy, weakness and swelling of the skin and subcutaneous tissue, associated with a solid edema that does not pit on pressure, trophic changes in the skin, hair thin and dry, subnormal temperature and slow pulse, gives us the typical clinical picture of myxedema. This patient has probably had a diminution or lack of function of the thyroid gland since the time of the menopause. Of the recognized etiologic factors for spontaneous myxedema, there are only two found in this case, the frequent pregnancies and the anaemia due to the menorrhagia for a number of years before the menopause.

It is interesting to note that the chief features in this case are the clinical opposites of those seen in hyperthyroidism. These are: the thick, dry, rough skin, the mental apathy, the tendency to increase in weight, the subnormal temperature, and the slow pulse. There are certain symptoms that are common to both myxedema and hyperthyroidism, for instance, anaemia, an acidity of the stomach contents, and moderate hypertension. While achylia gastrica is common to both conditions, constipation is the rule in myxedema and diarrhoea is common in hyperthyroidism. That the diarrhoea in the latter condition is due to an over-activity of the autonomic nerve supply to the intestines is the explanation offered by Eppinger and Hess. The fact that the blood pressure is moderately increased in both hyper—as well as hypothyroidism, would seem to indicate that thyroid therapy is not rational treatment for hypertension as claimed by some endocrine enthusiasts.

The thyroid gland owes its function to its hormone, thyroxin, which affects the vital activity of every cell in the body. Thyroxin is the regulator of metabolism. When thyroxin is formed in excess, as in exophthalmic goiter, there is increased oxygen consumption. When there is little or no thy-

toxin formed, as in myxedema, the decreased oxygen consumption explains the symptomatology. As an individual's basal metabolism is dependent on oxidation, the index of metabolic activity is the amount of oxygen consumed in a given length of time. Therefore, the term "basal metabolic rate" means the amount of oxygen consumed while at rest and after a period of 12 hours fasting. With a few unimportant exceptions, decreased oxygen consumption indicates hypo function of the thyroid gland. The clinical importance of determining a patient's metabolic rate in suspected diseases of the thyroid gland is perfectly obvious. As the instruments now in use for measuring the amount of oxygen a patient consumes, are fairly simple and have come to stay, it behooves doctors to learn something about them and to know what is meant by the term metabolic rate. Increased or decreased rate is figured on the percentage of a normal standard of 100. For instance, if the oxygen consumption is 50% more than the normal standard for a patient of the same age, sex and weight, the metabolic rate is 150, or 50 plus.

The importance of determining the metabolic rate is well illustrated by the findings in this patient. The instrument used was the Benedict transportable apparatus. On August 31st the basal metabolic rate was 68 and on September 3rd it was 62, giving an average of 65, or minus 35. There are reliable investigations which show that when there is a total absence of thyroid secretion, the metabolic rate is always between 60 and 65, that is, 35 to 40 below normal. What factors maintain metabolism at about 60 when no thyroxin is formed will not be discussed here.

From September 7th to September 12th, 33 grains of thyroid extract were given. On September 13th the temperature rose to 100.2 and the pulse to 100. The rhythm of the heart became quite irregular on account of rather frequent extrasystoles, a common occurrence in thyrotoxicosis. Without further treatment, the metabolic rate on September 21st was 88 and on September 29th, 85. On

the latter date, 10 mg. of thyroxin were given intravenously. On October 1st the rate was 94.6 and on October 4th, 103.6.

According to Plummer, in patients with myxedema, one mg., of thyroxin increases the basal metabolic rate 2%. The maximum dose of thyroxin is 10 mg. and the increased rate produced by this dose is maintained for two or three weeks. In a few cases of cretinism, Kendall was unable to influence either the basal rate or the clinical symptoms with any preparation of the thyroid gland given by the mouth, while an increase in rate and improvement clinically were manifested immediately when thyroxin was given intravenously. The cost of thyroxin, \$3.50 for 10 mg., excludes its use for therapeutic purposes.

In this patient, improvement in the rate and in the clinical symptoms was as striking after the thyroid extract as after the thyroxin, and she continues to improve on about 10 grains of thyroid extract a week. There has been a loss of 11 pounds in weight, the skin has lost its harshness and dryness and the pads of fat have disappeared. The memory has improved, the mind is clearer and she has gained in strength so that she is able to get about without assistance.

**Out-Patient Clinic of Dr. Donald R. Black,
Department of Medicine.**

A CASE OF CERCOMONAS INTESTINALIS

Mrs. W....., age 70 years, entered Bell Hospital December 3, 1919, complaining of persistent diarrhea, constant headache, pain in the arms and through the chest with weakness.

She has been having from two to six liquid stools a day for thirty-five years. No medicine that she had taken had given her permanent relief. Of late years she has complained of rather dull pressure-like pain in her head and also more or less aching pain in her chest and occasionally in her arms. Her appetite has been poor for the past three or four years, and she thinks certain foods do not agree with her, especially is this true of meat, cabbage, turnips, milk, and fruits. She never has passed blood per-

rectum, never vomits, and has no pain associated with her gastro-intestinal tract. She has never been jaundiced and gives no history of acute gastro-intestinal inflammatory condition. She has always been healthy. Her menstrual life was normal, has had no serious illness.

On examination we have a well-nourished woman, 5-6 in height, weighing 180 pounds; general appearance good; mucous membranes pink; her pupils are equal, regular and react to light and accommodation; throat entirely negative; teeth have been removed for 20 years.

CHEST: Percussion of chest normal, breath sounds normal, no rales.

HEART: Not enlarged, sounds apparently normal.

ABDOMEN: Entirely negative.

RECTUM: Slight pruritis ani, otherwise negative.

NEUROLOGICAL EXAMINATION: Entirely negative.

BLOOD COUNT: Hg. 85%, RBC 4,000,000, WBC 8,600; Poly 66%, Large L. 14%, Small L. 18%; Eosin. 2%.

WASSERMANN: Negative.

URINE ANALYSIS: 1400 cc in 24 hours. Amber, clear, acid, spg 1.018, alb.—, sugar—, diacetic—, acetone—, blood—.

MICROSCOPIAL: Many epithelial cells (squamous) very few leucocytes. No casts. No mucus.

GASTRIC ANALYSIS: One hour following Ewald Meal. Removed 70 cc of normal-looking contents. No pus. No blood. No sarcina nor Boas Opler bacilli. Total acidity 12. No free hydrochloric. No lactic acid.

STOOL EXAMINATION: Fluid light gray, very large amount of pus, very little mucus, very slight reaction for blood (Guiae), very large number of Cereomonads Hominis.

The patient was put to bed, given dilute Hel. puinine enemata, emetine hydrochloride hypodermically.

She improved slowly, her stools became less frequent and the pain in her head, chest and arms subsided. She left the hospital December 20, and was told to report each

week. Her stool remained free from parasites for a matter of two months, when an examination revealed as many as were found on the first examination. She was given coal oil enemata at three day intervals, one quart being used as an enema, was told to lie down and allow the solution to flow slowly and to retain it as long as possible. The first enema was to contain $\frac{1}{2}$ coal oil and $\frac{1}{2}$ milk; the second 2-3 oil and 1-3 milk; the third 3-4 oil and 1-4 milk; and the fourth straight oil.

She returned in two weeks, feeling better than she had for months. No parasites were found in her stool.

We were somewhat elated over our quick results and unwisely permitted her to discontinue treatment. Five weeks later she returned complaining of diarrhea and the same pain in her arms and chest. She was told to repeat her coal oil enema, was given coal oil by mouth and emetine hydrochloride hypodermically.

She made a very rapid recovery, and at present, two months following last course of treatment, is entirely free from symptoms.

Possibly the most striking point in this case is the matter of diagnosis. Just why the patient should have gone for so long a time with no definite diagnosis, is not evident. Certainly a stool examination is indicated in all diarrheas, especially the chronic cases. Cercomonads or Trichomonads are easily seen and always occur in large numbers. An extremely interesting phenomenon, in these cases, is the achylia usually associated with them. Whether the achylia is secondary to the parasitic invasion or vice versa, I am not able to say.

The matter of pathogenicity is interesting. There is no uniformity of opinion regarding the pathogenicity of these organisms. We encountered these cases quite frequently in France, occurring usually in soldiers who had long been in active service at the front and who were very badly constipated. The organisms would rapidly disappear when the bowels were opened thoroughly. These patients had no achylia.

There are occasional cases scattered

throughout literature; most of them being accidentally discovered and little or no attention paid to Cercomonas Intestinalis as a causative factor in diarrhea.

The treatment usually has been that outlined for other intestinal parasites. Some recent observations at the Mayo Clinic led me to try coal oil in this case and the result was so gratifying that I felt justified in reporting the case.

R

Deaths

Christopher Eugene Lett, Emporia, aged 54, died from cerebral hemorrhage April 7th. He was graduated from the Kansas Medical College at Topeka in 1909.

Charles Stuart Wall, Wakeeney, aged 68, died from valvular heart disease April 13th.

Corresta T. Canfield, Pittsburg, aged 87, died from influenza May 1st. He graduated from the Homeopathic Hospital College, Cleveland, in 1872.

Albert G. Girard, Clyde, aged 49, died April 18th from circinoma of the glottis. He graduated from the Western University, London, Ont., in 1907.

Walter E. Kirkpatrick, Haven, aged 39, graduate of the University Medical College, Kansas City, Mo., 1908, died while swimming at a swimming resort near Boston.

Henry W. Roby, Topeka, aged 78, a graduate of Hahnemann Medical College, Chicago, 1877, died at his home August 22nd.

Jacob Wilbur Light, Kingman, aged 60, a graduate of Pulte Medical College, Cincinnati 1884, a member of the Kingman County Society, died in California August 12th, from heart disease.

Alexander K. Berry, Burlington, aged 68, a graduate of the State University of Iowa in 1894, died August 20th.

Henderson Hines, Rago, aged 69, died July 15th. He was a graduate of the Cincinnati College of Medicine and Surgery 1866.

Eva Harding, Topeka, aged 62, died July

27th. Dr. Harding was a graduate of Hahnemann Medical College, Chicago, in 1882.

William Jacobs, Washington, aged 75, died July 16th. He was a graduate of the American Medical College, Eclectic, St. Louis in 1876.

William J. Conner, Labette, aged 84, died in Parsons, June 1st. Dr. Conner graduated from the Cincinnati College of Physicians and Surgeons in 1862. He had practiced in Kansas for 53 years and was once a state senator.

Orman G. Gowin, McCune, aged 60, a graduate of the Eclectic Medical Institute, Cincinnati, in 1882, died Sept. 18th.

Charles Oscar Cranston, Parsons, aged 51, a graduate of the Kansas City Medical College in 1894, died July 18th in a hospital at Joplin, Mo.

R

Ichthynat

An aqueous solution, the important medicinal constituents of which are ammonium compounds containing sulphur in the form of sulphonates, sulphones and sulphides. These characteristic forms of sulphur result from the sulphonation of the tarlike distillate obtained from certain bituminous shales. For the actions and uses of iehthynat see the general article on Sulphoichyolate Preparations and Substitutes, New and Nonofficial Remedies, 1920, page 318. The Heyden Chemical Works, New York City (Jour. A. M. A., Oct. 2, 1920, page 939).

R

Proganol

A compound of silver and albumose, containing not less than 8.3 per cent of silver in organic combination. For the actions and uses of proganol, see general article on silver preparations, New and Nonofficial Remedies, 1920, page 306. From 0.25 to 1 per cent solutions are used in acute gonorrhea, and 5 to 10 per cent instillations in chronic cases. In cystitis and urethritis from 1:1,000 to 1:2,000 solutions are used as irrigations. Used also in forms of bougies and tampons (5 to 10 per cent).

R

In order to preserve normal poise, the neuronic and harmonic systems must be properly insulated.

**THE JOURNAL
of the
Kansas Medical Society**

W. E. McVEY, M.D. - - Editor

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Is Abortion a Crime?

According to the laws of Kansas abortion is a misdemeanor, a minor offense against society. More serious offenses are classed as felonies. Except as the Statutes describe one offense as a felony and another as a misdemeanor no man knows where the line between may be drawn and in many states no such distinction is made. According to Webster, crime is "a violation of law, divine or human; an aggravated offense against morality or public welfare; great wrong."

It is not error than to describe a misdemeanor as a crime. Public sentiment, however, has much to do with the estimate of a crime, not the extent to which law is violated, but the degree of the offense to society. To what extent public sentiment may justify violations of law is a problem for the courts to solve. There are those, however, who would entirely overlook the criminal aspect of a deed which met the public approval.

We quote below some extracts from a letter received by the secretary of one of our county societies. The letter was written in defense of a man who had plead guilty to having produced an abortion and against whom charges had been made by the medical society to which he belonged. Since it is not our purpose to try the case in these columns,

but simply to discuss the sentiments expressed, only those points having a general bearing on the question are quoted; and these are quoted only because we believe the sentiments therein expressed are approved by a large number of people—many more, no doubt, that privately approved them than of those who have the courage to publicly express them.

After some explanations the writer of the letter says:

"Under article 7 the doctor has committed no criminal offense—abortion is a misdemeanor under the law. If he is charged with "gross misconduct" then I take issue with his accusers. Dr. plead guilty to committing an abortion upon a woman who was the mother of seven children, 35 years old, and the alleged father was 24—a boy. The issue of this misconduct—the life Dr. . . . aborted—would have been a pauper charge upon an already over-burdened community. Either a cripple or a criminal defective would have been brought to life to eke out a miserable existence, a charge upon the community, a menace to every soul and body with whom it came in contact, spiritually and physically. Instead of committing a crime against the community, Dr. . . . did it a service. Instead of being carried before a board of censors to plead justification for the act the community should vote the doctor a resolution of praise. Here was the chance to see that the guilty sins of the father and mother, both syphilitic, should not be visited upon the children—not only this child but the child of this child. Not only this child but your child and my child, should he be so unfortunate as to cross the path of this unborn babe with its heritage of the sin of its parents.

"It is a well-founded legal aphorism that the rights of the community are paramount to the rights of the individual. If it were not so this country would now be over-run with Reds. The community has a right to be protected from the effects of the diseased persons. Who but the physician to whom the case first comes can protect the community? If a physician is to be punished and held up to public scorn by his brother practitioners, in a case where he has performed a public service, what assurance is there that the same public will not view the entire profession with suspicion on every case where the judgment of the practitioner is used?"

It has been said that there is no fixed standard of morality; that morality is a relative rather than a definite quality; or as a religionist might put it—a state of mind rather than a mode of conduct.

Crime, on the other hand, is presumed to be a definite fact, a tangible circumstance, the essential feature of which is violation of law. However, an act may be a sin or a virtue, a crime or a duty, according to the time, place, manner and state of mind in which it is committed. Murder is regarded as the most serious of all crimes but while murder is the taking of life, the taking of life is not always murder, not always a crime—we admit that it is sometimes a duty. The public executioner deliberately extinguishes the life of the condemned criminal but one hardly expects him to show any elation in performing so gruesome a duty, in fact one can hardly estimate the mental and moral equipment of a man who would willingly seek such a duty. One may venture the assertion that many a man has been convicted and hung that would have been acquitted had it been made known that his executioner was to be selected by lot from among the members of the jury that convicted him. One may for a time feel some pride in the number of enemy lives he has taken in battle. One's sense of security may overshadow his repugnance at killing a man in self defense. Some have become insane and many have been prostrated by the knowledge that they had accidentally killed a man. What must be the mental and moral caliber of a man who will deliberately become the unauthorized executioner of an innocent human being, one against whom no criminal charge has been brought, who could by no possibility, by his own acts, endanger the life, happiness or peace of mind of another—the unborn babe.

Suppose it be conceded that if the fetus which was destroyed had been allowed to reach maturity it would have been a defective, a menace, a charge upon the community. That does not justify a member of the Medical Profession, of his own volition, becoming its executioner.

There are thousands of defectives, criminals and insane persons without whom the world would be better off, but no one proposes to be the self appointed executioner of these. Possibly the community might vote such a one a "resolution of praise" but in the eyes of the law, in his own estimation and in the estimation of his fellows, if he be sane, he would be a murderer.

If public sentiment is indifferent to the surreptitious removal of an embryo clandestinely implanted in the womb of an unmarried woman; if public sentiment is tolerant of the timely interference with the pregnant uterus of a too prolific married woman; if public sentiment approves the embryonic extinction of prospective paupers, defectives and criminals; then let the public modify its laws in harmony with its sentiment and appoint an official executioner for the lives to be thus condemned.

The medical profession, however, is not yet so imbued with this sentiment that it can extend the hand of fellowship to one who assumes the role without civil authority or moral justification.

R
Is It Utopian?

There is no subject about which the people are so much and so generally concerned at this time as the matter of health. The ultimate resources of government, state and municipal health organizations are being utilized to intensify the awakening interest of the public in the economies of health.

Only a few years ago it could be truthfully said that we were more concerned with the physical condition and health of our cattle and hogs than with the protection of our children and ourselves against preventable diseases. If these conditions have changed it must be credited to the systematic and persistent publicity given to these subjects by the various public health agencies.

The lay press has greedily taken up the various slogans of the public health movement, and articles with one of these slogans for a headline may be found in every newspaper. The popular magazines find authors and material for human interest stories and

semi-scientific discussions of health topics. School inspections, "Better Baby" contests, "Better Family" contests, and the numerous other efforts of the public health organizations to intensify the public interest in its physical welfare have undoubtedly yielded flattering results.

People are thrilled with the idea of possible physical perfection and prolonged life and are rapidly arriving at the conclusion that health is not a luxury to be purchased with money and loss of time, but a normal condition of mankind for the protection and maintenance of which the various governmental bodies should be responsible.

State Medicine has long been regarded as a possibility, and more recently as a probability, but with the rapid spread of public health sentiment the idea of a nationalized system of health administration is likely to meet with a very popular reception. Various conceptions of the future status of medicine have been advanced, but the medical profession has not seriously contemplated the possibility of any such comprehensive system of government control as is now suggested in some of the plans proposed. What is apparently the most Utopian of these conceptions of government medicine appeared in the editorial columns of "Progress" (which the publicity agent states is a magazine of international circulation.) The fact that this article is being sent out as publicity mat'er for the magazine indicates the popularity which the discussion of health topics has reached. We quote the proposition as it is stated:

"Let there be a Federal law requiring the United States Department of Health to establish and maintain a system of universal compulsory physical examination and education, defining in its most important details, just what the system shall be.

"These details might provide for the compulsory physical examination, with necessary physical education, of every man, woman and child in the United States and Territorial possessions, for instance, annually. The examination should be conducted in absolute

privacy and confidence by paid experts, preferably local Boards of specialists. Men should be examined by men and women by women, with no question as to the qualifications of those in charge of the examination. There should be no direct charge for the examination. There should be a formal report with or without recommendations or instructions according to the findings in each individual case. These reports might be made out in triplicate, one copy being given to the person examined (or the parents or guardian, in case of a minor), one copy retained at the headquarters of the local health authorities and one copy filed with the United States Department of Health, Division of Public Physical Examination and Education. Where definite recommendations are made or instructions given, the individual will be expected to comply so far as practicable with the recommendations or instructions, and be subject to prosecution for refusal or wilful neglect to do so. Provision should be made for the utilization of Departments of Health or Health Bureaus that now exist. There should be Public Health Information Bureaus maintained in local communities, where anyone may at any time seek and secure free information and expert advice concerning matters pertaining to health."

One's first impression is that the people would not tolerate such an infringement of their personal rights and liberties, but the history of the past few years must convince one that the people are willing to concede any reservations of personal privilege that may normally be theirs to the greater concern of the public welfare.

The apparent indifference to the enforcement of the regulations against the spread of venereal diseases compared to the difficulties now being met in the enforcement of the prohibitory regulations is an evidence of the attitude that may be expected upon questions that concern the public health.

B

Human nature is so constituted that it cannot honor a helpless man although it can pity him.

ETCETERA.

Placard for a doctor's office:
Man is made of dust. Dust settles. Be a man.

A crank has a one track mind. He can see but one thing all the time. A crank is useful. Note the crank in the auto.

Our ignorance is with us all the time and our great concern in life is to dispel it.

An educated man is one who knows where to get good advice and takes it.

Bill Nye said the reason he named his dog Entomology was the dog harbored so many insects.

The statement is made that a much larger per cent of the patients died in the wards on the shady side of the hospitals in Petrograd than on the sunny side of these hospitals.

Sunshine is essential to normal health. But every good thing can be overdone. From twenty to thirty minutes sunshine bath once or twice a day is probably an average medicinal dose of sunshine.

A brunette can take a larger dose of sunshine than a blond. In either case the eyes must be protected from the direct rays of the sun, or unusually bright light.

An intelligent recognition of the reaction of the blood, its pressure, together with its picture is essential to correct diagnosis.

Oesophageal varices may be caused by a diseased gland in the abdominal cavity or a tumor. In obscure cases of hematemesis, it is well to interrogate these glands and lay for a tumor. The source of the hemorrhage may be from a ruptured varicose vein in the oesophagus and the blood gravitate into the stomach and be vomited.

The ancient philosopher Favorinus said, "The milk of woman belongs to human babies, and the milk of cows to calves, and each to his own kind." The dairyman is ever watchful and vigilant of the kind and the quality of the food he gives to his cows to get the most milk and the best quality of milk from them. Would it be worth while to apply the dairyman's rule to the human mother in selecting her food?

A prominent physician, in a discussion on maternal feeding said, "Mothers should be made to nurse their babies." If there is a morbid fear and dread or repugnance on the

part of the mother every time the child nurses, the mother should not nurse the child. A seriously disturbed nervous organism cannot function normally.

Pediatritians advocate slow weaning of an infant instead of immediate weaning. This rule applies if the nursing mother is pregnant, and in the ordinary cases of the mother's sickness.

Yeast is a therapeutic placebo, and when fed to a patient causes a rise in spirits.

Conjugal tuberculosis occurs in over fifty per cent of cases. This would seem to justify the husband or wife living apart from the other—and their duty.

Cohn says that drugs occupy a secondary place in tuberculosis but a necessary place. His favorite drngs are creosote compounds, iodine compounds and calcium compounds in the treatment of consumptives.

Why did ye laugh at Mulligan's funeral, Pat?

Well, I'll tell yez. The day before Mulligan got kill-ed he sez to me, "Pat," sez he, "I don't believe there is a heaven or a hell." And there he was at the funeral, laid out all dressed up and no place to go.

It has been safer to be born a girl than a boy by 5%, up to the present date. Statistics gave man the hunch as to Nature's way of evening up the sexes. 105 boys are born to every 100 girls. This natural law of evening up was necessary owing to man's more hazardous occupation in life as a bread winner. Since woman is placed on an equality with man, Nature will have to amend her law of survival. In fact, she may have to reverse the law owing to maternal mortality—if the human race continues to vegetate.

The most frequent cause of the restlessness of infants is an irritated stomach from undigested food (curd), or food in excess. The usual way of quieting the infant is by the mother giving it the bottle or breast and thus increasing trouble. In such cases, pure water should be given with a little fruit juice to dilute the mass and relieve the irritation.

It is estimated that 300,000 children under one year of age die every year in the United States, and over 400,000 die under ten years of age.

The most important duty and responsibility

resting upon the physician is to insist on the proper feeding and care of the mother and child. This is primary Eugenics.

The remark is often heard that medical science is baffled. The too frequent cause of the "baffling" is a fixed opinion as to what the symptoms ought to be—the diagnostician being "SOT."

False teeth of ivory, on plates of the same material and held in place by gold wire, were used in the year 1000 B. C.

Since prohibition in Kansas has become sky-blue, and as a reminder of what might have been, the professor of biology in the Kansas Manual Training School says "That every home should have a toad and a snake in it." Sounds like a Puritan of the half-fir type. It brings to mind the testimony of Old Uncle Remus (colored) when asked to relate the conversation between two trouble-makers who had gotten into a fight.

"Now, uncle," said the lawyer, "tell us just what conversation occurred."

"Jedge, I kain't jes' member it all," replied candid Uncle Remus, "'cept dey wa a tellin' one anudder what dey is."

The proprietary medical law in England prohibits altogether the sale of remedies for cancer, consumption, lupus, deafness, fits, epilepsy, diabetes, paralysis, locomotor ataxia, Bright's Disease and rupture. All proprietary preparations and appliances are to be registered complete with a full description of them as well as the owner's name. This law, if enforced, will make a jobless man out of the Quack Orator.

There are several suggestions in "Etcetera" in the September number of this Journal, that bear repeating. Among them are the following:

Excess diseases are overshadowing deficiency diseases. Too much fuel (food) is put in the firebox, and it smothers the fire out. In plain American—we eat too much. Again—Resistance to disease has been reduced by the common use of refrigerated meats and preserved foods—they lack vitamins.

Moral—There is too much monkeying with what we eat.

Interesting—It is reported that "an Englishman, Hobart Hook, in 1667, demonstrated to the British Royal Society that a dog from which the ribs and diaphragm were removed could be kept alive by air forced

into the windpipe with bellows. He punctured the lungs full of holes so that the current of air sent down the windpipe went on through, and the lungs did not move. So long as this current of air was passed through the lungs, life continued."

Stefanson, the Arctic explorer, says, "The uncivilized Eskimo does not need a dentist. That the Eskimos' teeth are free from decay so long as they are out of the pale of civilization." I'm from Missouri. It is probably a fact that uncivilized peoples as well as other wild animals are freer from toothache and decayed teeth than civilized creatures; but all of these perfection toothed stories are to be believed for accommodation.

A new innovation in the Cincinnati schools is the weighing of all school children. The work is done by the teachers.

Charts detailing the results of their work will be turned over to the city health department. District health officials will then make a thorough physical examination of those children who, according to the charts, are under weight.

Parents are invited to witness the examination of their children. This work is being done along one of the main lines leading to Eugenics—or better babies.

This method is physically scientific and a psychological road leading around parental opposition to the detection of the physical and mental defects in their children. These defects can be cured or palliated and the niche in the Masonic wall of life found that the child can fill. It will also put the child on the side of the health authorities, for Johnny will want to get as big as his ideal boy, Billy, and will hound his parents to give him a chance by having the doctor fix him up.

"The health department of Los Angeles is arranging to establish a preventorium for the care of anaemic and below-normal children. And the county hospital authorities have a malignancy board of five specialists to investigate all probable or actual cases of cancer with a view to prescribing remedies or in the event the patient is beyond hope of recovery, palliative treatment. This board meets once a week to go over all cases referred to it." 14,000 patients, treated for various diseases, passed through the Los Angeles County hospital last year.

Clough (Bull. Johns Hopkins) from experimental injections of adrenalin in a series

of cases concludes that it is not a direct means of maintaining the blood pressure at the normal level and that there is not any satisfactory direct proof of an increased amount of adrenalin in the blood in human disease or that high blood-pressure is due or associated with adrenal over-activity or "hyperadrenalaemia." In the great majority of patients with high blood-pressure there is no evidence of any thyroid disturbance and it is doubtful if there is any direct relation between the two conditions.

More than thirty years ago the possibility of phimosis causing pain in the hip-joint, simulating tuberculous arthritis, was suggested by Adams and later by Reverdin. Veyrassat (Lyon Cuir. '19) reports a case, treated by immobilization for many months without improvement. The hip-joint was easily movable, rigidity slight and little muscular wasting. The child had an adherent prepuce and enlarged inguinal glands. Circumcision was followed by immediate disappearance of pain in the hip and a rapid gain in weight.

Some experiments by Rodger, Rahe and Ablahadian (Cornell Univ. Bull.) show that alcohol extracts from the thyroid a non-coagulable material which given subcutaneously, vigorously stimulates gastric secretion—probably by its action upon the terminal filaments of the vagus. Extracts of thyroids removed for hyperthyroidism were inert. Extracts of the adrenal gland vigorously inhibit gastric secretion. Extracts of the pituitary gland also inhibit gastric secretion but not so vigorously as the adrenal.

Louisa Martindale (Brit. Med. Jr. 10-9) reports 37 cases of uterine fibroid treated with intensive x-ray therapy. Cases were chosen for this treatment where the size of the tumor was not larger than a six months pregnancy, where the fibroid was interstitial and prominent symptoms were menorrhagia, and also those where the patient was suffering from a serious heart lesion even with larger tumors. The results were excellent in practically all of the cases.

The doctor concludes that x-ray treatment may be regarded as satisfactory for all small uterine fibroids associated with hemorrhage, the health improves and there is great reduction in the size of the tumor. It brings about a climacteric involving less disturbance even than a natural one.

McCartney (Brit. Med. Jr. 10-9) reports the use of a mixture of potassium bromide and sodium bichlorate in the treatment of fits. The total number of patients so treated was

42. "In all there is a marked improvement in the mental state of the patients, and in all except one the number of fits has been reduced. In addition to the marked change and lessening of the fits, other points noticeable are the great reduction in the amount of sedative used, and the marked diminution in number of accidents which occur."

The National Research Council is a cooperative organization of the scientific men of America. Its members include, however, not only scientific and technical men but also business men interested in engineering and industry. It is established under the auspices of the National Academy of Sciences and enjoys the cooperation of most of the major scientific and technical societies of the country, its membership being largely composed of appointed representatives of forty or more of these societies. The Council was organized in 1916 to coordinate the research facilities of the country for work on war problems, and in 1918, by executive order of the President of the United States, it was reorganized as a permanent body. Its essential purpose is the promotion of scientific research and of the application and dissemination of scientific knowledge for the benefit of the national strength and well-being.

An institute on venereal disease control and social hygiene will be conducted in Washington, D. C., beginning November 22 and continuing to December 4, by the United States Public Health Service. Courses of instruction will be given by several of the most prominent specialists and clinicians in the country. The following courses have been announced:

FULL COURSES

1. The diagnosis and treatment of syphilis.
2. The diagnosis and treatment of gonorrhœa.
3. Advanced course in the treatment of syphilis and gonorrhœa.
4. The delinquent women and the law.

HALF COURSES

5. Diagnosis of the mental condition of delinquent women.
6. Sex education.
7. Protective work for girls.
8. The clinic Nursing and Social Work.
9. Heredity and eugenics.
10. Sociology and social hygiene.
11. Methods of public education.
12. Methods of law enforcement.
13. Sex psychology.
14. Clinic management.

The latest news from the Medical School

indicates an enthusiastic interest in the development work recently begun. The site for the new building has been surveyed and the plans approved by the Board of Administration.

An alumni reunion has been arranged to begin November 11 and the following program has been announced:

Clinics at Bell Hospital from 8:30 A. M. until 1 P. M. Luncheon at the Hospital after which there will be an Auto Drive around the new Site and over the Boulevards. Banquet at the Muehlebach Hotel at 7 P. M., where you will be told all about the plans of the School. Chancellor Lindley will sure be present and we are hoping to have Governor Allen and some of the members of the Board of Administration.

Friday morning:—Clinics at St. Margaret's Hospital from 8:30 A. M. until 1 P. M.

Friday afternoon:—Special Clinics.

Friday night:—Meeting with the Academy of Medicine at 8 P. M. in the Library Rooms on the 13th floor of the Rialto Bldg.

Saturday (November the Thirteenth) is the big game at Lawrence between Nebraska and K. U.

The Secretary of the Alumni Association, Dr. D. R. Black, requests that those who will attend the reunion write him to that effect at Bell Hospital, Rosedale, Kansas.

Beginning with the January issue, the Medical Review of Reviews of New York will inaugurate a new department for the advancement of the science of Chemo-Therapy.

Believing Chemo-Therapy to be a rich field for the development of products of great therapeutic value, and that we have so far neglected to give it the importance that past researches would warrant, we are placing this department at the disposal of all those who may find an interest in the subject, as an open forum where contributions dealing with this science will be welcomed.

At the request of the League of Red Cross Societies a large typhus research hospital will be operated in connection with the new American Red Cross hospital recently established in Wilno under the direction of Major F. W. Black. Major Black, who has been in Poland since the armistice, was with the A. E. F. during the war.

For two years past hospitals in northern and eastern Poland have been flooded with typhus patient's. In localities where hospitalization was inadequate, as in Galicia, whole villages have been wiped out. In Brest-Litovsk, where thousands of war prisoners have been crowded into barracks, there has been an enormous death rate.

In the light of the scale on which typhus is now sweeping Russia, it is believed that modern medical science will be hard pressed to prevent a world wide plague, extending perhaps to western Europe and America.

The State Board of Health has issued some new regulations regarding reportable diseases. We would particularly call attention to the last one. The following letter was mailed to the physicians in Kansas under date, October 20:

Dear Doctor:

During the last year we have checked the case reports against death reports and have found a large number of death certificates in which the cause of death as given was a reportable disease, and yet this disease had never been reported to the city or county health officer having jurisdiction. In all instances letters of inquiry were addressed to the physicians signing the death certificate. The reasons given for failure to report such cases were so universally the same that it is deemed advisable to invite the attention of each physician of the State to certain requirements that seem to be so universally misunderstood. These are as follows:

First: Every physician attending any person suffering from, or that he may suspect to be suffering from, any reportable disease must immediately make report of such case in writing, on blank cards provided therefor, to the health officer in whose jurisdiction such case occurs.

Second: The fact that some other physician may have seen the case first does not excuse a second attending physician from reporting such case.

Third: The fact that the patient was seen by the last attending physician only a short time before death does not excuse the last attending physician from reporting the case.

Fourth: Even though the patient be dead at the time the physician reaches the house and the physician finds that the deceased person died of a reportable disease, the case should be immediately reported to the health officer in order that he may know that such infection exists in his jurisdiction.

Yours truly,
T. D. Tuttle, M. D.,

The U. S. Public Health Service needs hundreds of graduate nurses for its general hospital work but also and particularly for the care of former soldiers suffering from nervous and mental disorders. So great is its need for the latter class that it is probable that at present enough trained nurses are not available in the country. The Public Health Service accordingly purposed to es-

tablish a training school for nursing in neuro-psychiatric diseases in its special hospital (No. 49) on Grays Ferry Road, near Philadelphia, where nurses with general training may take a special course in this class of work. This hospital has a capacity of 240 patients and will afford exceptional opportunities for instruction in the most modern treatment.

An appeal is made to nurses to come forward for this work; for if they do not do so there seems to be no one to take their place. The hospitals now operated by the U. S. Public Health Service are already 150 nurses short; and the Service faces the necessity of opening several new ones with an inadequate force. Applications should be made to the Surgeon General, U. S. Public Health Service, Washington, D. C.

The Surplus Property Branch, Office of the Quartermaster General of the Army has sold to Thomson & Kelly Co., of Boston, the remaining surplus of bandages and absorbent cotton, purchased for the use of the Army during the war. The sale netted the Government more than \$1 000,000. The bandages alone represent a quantity sufficient to supply the hospitals and surgeons of the United States with all their needs for at least 18 months. The Boston firm was the highest of a number of bidders for these items. Included in the sale were a million dozen roller and between two and two and one-half million compressed bandages, and approximately 2,250,000 1-ounce packages of absorbent cotton.

Dr. L. B. Bradford of Boston, in charge of the American Red Cross hospital of 150 beds at Prizren, has been the custodian of valuable secrets. Coming into such intimate contact with Turks, Serbs and Albanians, and saving, as he does, the lives of their mothers, fathers, sisters and brothers, it is only natural that he should win the confidence of thousands, some few of whom endeavor to repay his kindness by telling him hidden treasure stories, most of which are true. But the treasures are not available to Dr. Bradford, because the hidden hordes are in the form of lodes of valuable metals like gold, silver and copper, and Dr. Bradford is not a mining engineer.

Prizren is located in wild country. And a native, possessed of the secret of a gold mine is not a good insurance risk. It is the Balkan custom to do away with plain citizens who know too much about valuable mines. About one quarter of the cases in the hospital are gunshot wounds, many of whom are Turkish and Serbian travelers shot up by the bandits

that infest the mountains. An odd feature of these wounds is that 87% of them are below the knee. The bandits shoot low, for they are averse to taking human life, and want pocketbooks and jewelry only.

A site for the new building in Washington which is to serve as a home for the National Academy of Sciences and the National Research Council has recently been obtained. It comprises the entire block bounded by B and C Streets and Twenty-first and Twenty-second Streets, Northwest, and faces the Lincoln Memorial in Potomac Park.

Surgeon-General Cumming, of the United States Public Health Service, has just issued a fresh warning against the use of horse-hair shaving brushes, to which not a few cases of anthrax have been traced.

He says: "The Public Health Service has made every effort possible under existing laws and regulations to prevent the occurrence of anthrax due to infected shaving brushes, but in spite of its efforts anthrax cases occur and will continue to occur unless the public ceases to buy and use horse-hair brushes for shaving.

"It is the consensus of expert opinion that shaving-brush anthrax is contracted only when the shaving brush is made of horse-hair; and Congress at the next Session will be asked to prohibit the use of horse hair for that purpose. It is doubtful however, if any effective measures can be taken by health officials to curtail the use of the horse-hair shaving brushes now in trade channels, some of which are presumably infected, except a direct warning to the public not to buy or use such brushes."

For fifteen hundred years the peasants of the Pontine district of Italy, near Rome, have been trying to cure malaria with pills whose principal ingredient is cobwebs. Needless to say they have not succeeded very well, and as a result fever takes a startling toll of lives every year in this unhealthy region.

Recently, however, the Junior Red Cross of America, through its three orphanages, has introduced the miracles of quinine among these people, who are direct descendants of the Sabines and retain many of their pagan customs. Cobweb pills have therefore lost some of their prestige in face of the cures which have been made. And offerings to the fever goddess, which formed a sort of secondary treatment, are going out of style.

The Pontine region is one of the most unhealthy in Italy. Most of the women have been widowed two and often three times by malaria—this curious state of affairs being

accounted for by the community law which forbids the women to leave the high and dry places where the villages are built and accompany their husbands who go to their daily labor in the fever filled valleys.

Fourth Roll Call of the American Red Cross will be held during the two weeks from the 11th to the 25th of November. During that time all of the ten million members who joined last year will be asked to renew their memberships, as an expression of their faith in the ideal of Service for which the Red Cross stands, and as an evidence of their desire to help carry out the after-war public health program of the organization.

This program, decided on after the signing of the armistice, aims to concentrate Red Cross effort on public health work in this country. Much has already been done. Last year more than 30,000 disaster victims were given assistance, more than 26,000 men, still in hospitals as the result of the war, had Red Cross service, 92,000 women and girls completed courses under Red Cross nurses in home care of the sick. Community nurses have been appointed, First Aid and Dietetic courses given, Health Centers established—in short, the Red Cross has endeavored in every way possible to carry out a nation-wide campaign against disease.

But to continue, it naturally needs the continued support of its members. Last year, when the organization was in the transition stage between war and peace work, ten million, exclusive of the fourteen million Juniors, renewed their memberships. This year, with the peace work in full swing, the Red Cross asks each of these members to pay his dollar and join for another year. It asks all those who, for whatever reason, did not join last year, to become members now. For it desires to have the whole American people standing solidly behind it in the fight for a healthier and happier America.

Dr. Edwin G. Davis reports his observations on acriflavine in gonorrhoea in the Nebraska State Medical Journal, Jan., 1920. In the summary of his report he says:

"In the laboratory, acriflavine has been shown to have increased antiseptic strength in serum, to retain its antiseptic strength in urine, and to be non-toxic, non-irritating and diffusible. On protein-containing media it inhibits the gonococcus in a dilution of 1:300,000, in this respect having at least 600 times the potency of protargol. Experimentally then acriflavine would seem to be ideally suited.

"Clinically, expectations are only partially fulfilled. Brilliant results were obtained in

sixteen out of a series of thirty-four cases. There were, however, nine cases in which the drug was without apparent effect, and nine more in which results were indifferent.

No extravagant claims are made for the efficiency of acriflavine in the treatment of gonorrhea. The statement, however, is fully justified that with acriflavine results are distinctly better than with the organic silver preparations in common use."

R

It Depends

BY THE PRODIGAL

Is a thing wrong because it is prohibited? Or is it prohibited because it is wrong? The question is double-barreled, and comes under the rule of three. In the case of the drugless healer, the rule works three ways. Hence, it all depends.

In the states where the drugless healer is recognized by law to practice, it is right. In the states where the law prohibits him to practice, it is wrong. In other states having hybrid medical laws, the drugless healer appears to be looked upon as a hermaphrodite and is permitted to wear any kind of dress or address at his work or on parade.

In those states where it is wrong to practice drugless healing, the prosecutors of the cult are health or examining boards composed of legally recognized physicians. In the states where drugless healing is right, drugless healers are on the examining boards. In other words, a drugless healer on the examining board cures the defect—"anecdotes the pisen."

The Homeopath and the Eclectic came up through great tribulation and distress, evolving into a high plain or professional altitude before they could stand up to be counted. They proved themselves worth while to be censored into the household of faith in furthering rational medicine by their infinitesimal dosage and the elimination of all mineral drugs in the treatment of disease and thus helping to establish a mean, and doing away with extremes by a give and take.

They, also, emphasized the value of vegetable drugs and called attention to the injury done by and the danger in giving such

large doses of mineral drugs as were given by the Alopaths. It was a long roundabout way of correcting an evil and thus jolting the regulars out of a rut and heading them toward the broad and smooth cement medical boulevard which leads toward liberalism.

The drugless healer occupies a similar position in present day medicine to that of the earlier day Homeopath and Eclectic. Hence, he is not an unmitigated nuisance. He is here to stay. He has a mission to fulfill. This long-felt want being filled by the drugless healer instead of by the physician is not because the physician is ignorant of the value of manipulation of the human body in the cure of disease, nor that of suggestive treatment; but it is because of the failure of the medical profession as a whole to practice what it knows. A failure of the profession as a whole to take up and emphasize by practice these hints nature has given it as being too small game for the calibre of the professional gun and the oversize of the shot for the game.

Now, there is meat in the drugless healer's cocoanut. It is all one kind of meat. There is no variety. He has a onetrack mind. He can see but one thing all the time. Whereas, a physician can see one thing at a time. The horizon of the drugless healer is limited, exclusive. The horizon of a physician is boundless, inclusive.

What is the attitude of the regular medical profession toward the drugless healer? What should be its attitude?

The answer to the first question is antagonism and suppression. Such an attitude advertises the cult and gets the sympathy of the masses. Truth may be antagonized and suppression hold it in abeyance for a time, but not all the time.

The truth contained in drugless healing carries the vagaries held, and the healers flimflam the people and they pay the penalty for their ignorance in not being able to differentiate between the true and the false. The medical profession pays a penalty for its lack in aggressiveness and failure to economize by practicing all it knows and discharging its full duty to the public as

conservators of health, by omission. In addition to omission, that faint but pungent professional odor noticeable may emanate from esthetics. Esthetics is the science of human duty. But any virtue when carried too far degenerates into a vice. Conscientiousness passes into stubbornness; economy into stinginess; prudence into cowardice; and orthodox medical ethics into persecution.

Before attempting to answer the second question, I will give my experience and what I learned by a visit to a leading Chiropractic School on the Pacific Coast.

I subjected myself to the manipulation, as universally practiced in the school. Having divested myself of clothing down to the buttocks, which is all that is required, and laid face down, the face through an oblong slot in the bench, the forehead resting on the margin of the slot. This opening frees the face from pressure and enables the patient to lie straight, not twisting the neck.

The bench or table is about one foot in height, padded, thus rendering the chest position fairly comfortable. The president of the school palpated my spine from occiput to coccyx, blue-penciled the abnormalities of the spine.

The odontoid process was found to be deflected and there was an impinging of the two lower lumbar vertebrae. The manipulator sat on a stool in front of me and clutched a hand behind each jaw, the fingers reaching up behind the occiput. He gave a sudden jerk forward with great force, in line with the spinal column.

The crackling of the cervical vertebrae reminded me of having my teeth extracted under local anaesthesia or when my turbinates were removed af'er deadening with local anaesthetic. The noise was audible several feet distant, and my son, who was with me, at the time, was frightened by the crackling of the bones (not dry bones,) thinking that I had been injured.

In treating the lower segments of the lumbar vertebrae, he sat at my left side and biffed the blue penciled spot with the palm and muscular part of the hand with force enough to make the bones (vertebrae) crepi-

tate, and the noise heard the same as in the neck jerk.

In neither case was there marked pain, although the sudden force developed a sore place at the point of contact in the vertebrae, he had marked, of which I was unconscious before or after the one side swipe. It also caused a sharp tingling sensation in the course of the left sciatic nerve down the hip similar to being struck on the funny bone—minus pain—although it was an unpleasant sensation. There were no after effects pro nor con. Spinal adjustment—C.?

A great many patients were being treated by the students. There are no educational entrance requirements. The fee, including books, is about \$350.00. The time required is 2400 hours, or 8 hours a day for 300 days. The printed curriculum of studies is an elaborate one. Dissection of the human body is not required. On inquiry, the president said, "I have no literature on Chiropractice."

This school has a large attendance of students, and is well patronized by patients. The drugless healers' statistics show that 35,000,000 people, or approximately one-third of the population of the United States, are patients of drugless healers. These statistics may overestimate their clientele, but the cult is growing rapidly.

We will reserve an attempted answer to the second question, "What should be the attitude of the medical profession toward the drugless healer?" until a more convenient season. Agrippa.

R

SOCIETIES

Medical Association of the Southwest

The fifteenth annual meeting of the Medical Association of the Southwest will be held in Wichita, November 22, 23 and 24. The following general announcement of the program has been received.

MONDAY, NOVEMBER 22, 2 P. M.

Second Annual Reunion of the Medical Officers of the Southwest.

During the afternoon the Wichita Profession will extend to the visiting ex-officers automobile rides over the city and a social

session will be held in the Headquarters at Hotel Lassen.

At 7 p. m. there will be a banquet at the same place to be followed by informal talks on army experience and it is expected there will be one address by some former Medical Officer of National Reputation.

TUESDAY, NOVEMBER 23

Beginning at 8 a. m. clinics in all the hospitals. 1 p. m. General Session at which time the President will deliver his annual address and such committees as are necessary will be appointed.

2 p. m. the Sections will meet, one in the Chamber of Commerce and the other two in the Hotel Lassen.

Adjourn at 5. p. m.

7:30 p. m. General session with the address of the evening by Dr. F. M. Pottenger of Monrovia, Calif.

9. p. m. Informal smoker, tendered by the members of the profession of Wichita.

WEDNESDAY, NOVEMBER 24

Clinics from 8 a. m. to 12 m.. 1:30 p. m. General session when the reports of the Secretary Treasurer, and the Committee on Nominations will be received and the next place of meeting selected.

PROGRAM FOR THE LADIES

All who remember the splendid entertainment given the ladies on the occasion of a former meeting at Wichita will want to come again.

The program this year will include automobile rides over the city, visits to the different places of interest and luncheon at one of the city clubs either the Country or the Boat Club.

While the general sessions are being held the ladies will also be entertained at the picture shows of which Wichita has some very fine ones.

Jewell County Society

The Jewell County Medical Society met irregular annual session Oct. 8th, 1920 at Mankato. The following officers were elected: Dr. J. E. Hawley, President; S. B. Dykes,

Vice-President; Dr. L. V. Hill, Secretary-
Treasurer.

Dr. L. V. Hill read a paper on "The Diagnosis of Diseases of the Heart Based on the Study of Function of the Heart Muscle which is at Fault." Then followed a discussion of the treatment and prognosis of the commoner diseases of the heart by Dr. Hawley and Dr. J. B. Dykes.

Dr. D. D. Allen was then asked to discuss the recent typhoid epidemic in the Olego vicinity together with the methods pursued by Dr. Maxey of the State Board of Health in finding the source of infection.

The society then adjourned until the spring meeting to be called by the President and Secretary.

L. V. Hill, Secretary.

Sumner County Society

An announcement from the Sumner County Medical Society indicates something of an innovation in society programs. The announcement states: "We are bringing members of the Medical Faculty of the Kansas University to give miniature post-graduate courses."

On October 21, Dr. Sutton gave a lantern slide lecture on "Prevention and Treatment of Cancer of the Skin." On the afternoon of that day Dr. Sutton conducted a skin clinic in the Red Cross Clinic Rooms.

Franklin County Medical Society

The regular monthly meeting of the Franklin County Medical Society was held on Wednesday evening, Oct. 27th, at the office of Dr. W. L. Jacobus. Dr. Frank C. Neff of Kansas City, Mo., gave an illustrated lecture on the subject "Physical Examination of Infants." After the lecture there was an informal discussion of the subject.

The next meeting of the society will be on the evening of November 24th. Dr. P. T. Bohan of Kansas City, Mo. will be present and hold a clinic for cases of "Heart Disease." The clinic will be followed by an illustrated lecture on the same subject.

F. A. Trump, President.
C. W. Hardy, Secretary.

Northeast Kansas Society

The Northeast Kansas Medical Society held its regular semi-annual meeting in the Chamber of Commerce, Kansas City, Kansas, October 28.

There were about one hundred present and the program was decidedly interesting and instructive. The following papers were read and freely discussed:

- "Frontal Sinus Diseases"
..... Dr. E. P. Hall, Kansas City, Mo.
- "Reminiscences"
..... Dr. C. C. Goddard, Leavenworth
- "Perforated Duodenal Ulcer"
..... Dr. H. L. Charles, Atchison
- "Syphilis in the Innocent"
..... Dr. H. G. Collins, Topeka
- "Aortitis and Aneurysms"
..... Dr. W. T. McDougall, Kansas City
- "Osteo-Periosteal Transplants in Closure of Cranial Defects". Dr. C. C. Nesselrode, K. C.
- "Hormones and Hormone Action"
..... Dr. C. F. Nelson, Lawrence
- "Basal Metabolism"
..... Dr. P. M. Krall, Kansas City
- "The Thyropathies"
..... Dr. P. T. Bohan, Kansas City, Mo.
- "Surgery of the Thyroid"
..... Dr. T. G. Orr, Rosedale
- "The Thyroid in Psychiatry"
..... Dr. Karl A. Menninger, Topeka
- Discussion opened by Dr. L. S. Milne, Kansas City.

After the regular program was completed the visiting doctors were entertained at dinner by the Wyandotte County Society.

R C. & C. Bureau

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accounts, give the name in full if possible, the occupation if known or can be learned, the cor-

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Very truly yours,

S. S. GLASSCOCK, M.D., Res. Supt.

A. L. LUDWICK, A.M., M.D., Asst. Supt.

EDITH GLASSCOCK, B.S.

Business Manager

Office 910 Rialto Bldg., Kansas City, Mo.

rect address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

Present addresses wanted for the following:
Last known address

Carrell, Mr. Luther Chanute, Kans.
Edwards, Williams Hartford, Kans.
Eldridge, Mr. E. E. Los Angeles, Calif.
Eriksen, E. G. 839 Minn. Ave., Kansas City, Kans.
Fravel, Ira 425 East F. St., Hutchinson, Kans.
Gardner, Mr. H. T. Upton, Kans.
Gavin, Mr. Peter Bazaar, Kans.
George, Miss Jessie 325 East A. St., Hutchinson, Kans.
Hannon, Mr. C. Med. Corps, Ft Riley, Kans.
Mitchell, J. W. 602 East 3rd St., Hutchinson, Kans.
Orr, John Topeka, Kans.
Pottinger, Mr. Arthur 806 East 8th, Topeka, Kans.
Powell, Mr. Benjamin 517 Harter St., Hutchinson, Kans.
Roberts, Geo. F. Erie, Kans.
Smith, Mrs. Julis 31 N. 6th St., Kansas City, Kans.

IV

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the Act of Congress of August 24, 1912, of the Journal of the Kansas Medical Society Published Monthly at Topeka, Kansas, for Oct. 1, 1920.

State of Kansas. County of Shawnee, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared W. E. McVey, who, having been duly sworn according to law, deposes and says that he is the editor of the Journal of the Kansas Medical Society and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of Post Office Address

Publisher—W. E. McVey, under direction of the Council of the Kansas

Medical Society Topeka, Kansas

Editor—W. E. McVey Topeka, Kansas

Managing Editor—None.

Business Manager—None.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)

Kansas Medical Society, Dr. C. C. Kippel, Hutchinson, Kansas, President; Dr. J. F. Hassig, Kansas City, Kansas, Secretary; Dr. L. H. Munn, Topeka, Kansas, Treasurer.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of

the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only).

W. E. McVEY, Editor

Sworn to and subscribed before me this 29th day of September, 1920.

LUCILE ATKINS,

(Seal) Notary Public.

(My commission expires Oct. 26, 1921.)

WANTED, FOR SALE, ETC.

WANTED—A trial case and other optical instruments. Address: M. Bostie, 1625 Western Avenue, Topeka, Kansas.

FOR SALE—Scheideil-Western X-Ray machine, for direct current, in good condition, \$250. Reason, change in current. Address Dr. W. E. Currie, Sterling, Kansas.

FOR SALE—One Yale chair in (A 1) good condition at half the price of a new one. Doctor L. B., 83 Elm City, Kansas.

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THE JOURNAL

of the

Kansas Medical Society

Vol. XX

TOPEKA, KANSAS, DECEMBER, 1920.

No. 12

The School of Medicine: Its Task and Its Facilities

MERVIN T. SUDLER, M. D., ASSOCIATE DEAN

The population of Kansas is 1,769,185: 2,688 registered physicians live in the state. There are 147,000 physicians in the United States, including the Phillipines, the Army and the Navy; approximately 2% die annually. The number of physicians required to care effectively for a given population varies according to the density of the population and the facilities of an institutional nature that are provided. The denser the population and the greater the number of good institutions, the fewer the physicians necessary to care for the population.

In 1919-20, 250 citizens of Kansas registered as medical students. Of these, 209 registered in Class "A" schools and 41 in schools not legally recognized by the Board of Registration, 119 registering in the University of Kansas. Of the 90 going to other Class "A" schools, 24 attended the first two years at the University of Kansas and went elsewhere because of better clinical facilities. If all of these Kansas students in Class "A" schools graduate and return to Kansas to practice medicine, 53 would enter the profession annually. In other words, there would be an annual replacement of less than two per cent. In order to maintain the profession at its present level, the average length of active practice would have to be somewhat over fifty years.

It is therefore obvious that Kansas is facing a decrease in the number of its physicians. It is quite possible that the number might be somewhat decreased with safety to the welfare of the citizens of Kan-

sas, but hardly to the extent that it is threatened. This condition is nation wide—a news item recently spoke of the growing scarcity of physicians and nurses in New York; the Kansas City Star for November 28 carried a similar item in regard to Virginia and North Carolina.

The facilities provided by the state for the education of physicians are limited. Approximately forty-five can be cared for in each of the first two years at Lawrence—not more than twenty should be permitted to enter the third-year or fourth-year class with their present facilities.

A building to house the medical sciences is badly needed at Lawrence and should be provided either by direct appropriation or by the use of the Robinson estate, which was intended by the donor for this purpose. The erection of the new building will increase the facilities of the last two years when that event is consummated.

It is interesting to compare the facilities provided for medical education and hospital work in Kansas with those of surrounding states. The legislature of 1919 appropriated \$200,000 with certain conditions attached: Nebraska has spent \$750,000 in the last four years, Michigan is spending \$3,000,000 for a hospital alone. In 1908, Iowa was practically on an equal footing with the University of Kansas, except that Iowa had a fine building for its medical sciences, which was lacking in Kansas. To put it graphically, if Kansas should continue to appropriate the same amount each year as it did the past two years, and the present price of building continues, it would require seven and one half years to equal the present facilities of Nebraska, thirty years to equal those of

Iowa, and approximately fifty years to equal those of Michigan. In the fourteen years preceding 1919, the State of Kansas appropriated \$75,000 for buildings; and the spirit of the faculty had reached a low ebb when the new appropriation was made. The faculty now feels that there is a new era before the School of Medicine—an era of development—since the Governor, the Legislative Committee, the Business Manager, and the Board have all expressed themselves as favorable to the proper development of facilities on the new site. If their plans are carried out, the medical profession will be under deep obligations to the gentlemen filling these positions.

The keynote of the School of Medicine of the University of Kansas is service,—the education of physicians and nurses and service to the sick of the state who are unable to provide care for themselves. The selection of these patients depends upon the profession of the state. While those in charge desire that no needy patient be denied, they also desire that there shall be no pauperization of patients—no patients accepted as free who should rightly go to their home physicians, paying for their care. In other words, cooperation with the practitioners of the state is sought, so that the service rendered by the School of Medicine and its staff will be distinct service both to the practitioner and the school. The educational side forms a most valuable “by-product.”

At present, the clinical facilities are used almost altogether in teaching undergraduate students of medicine, and nursing, with an occasional clinic to alumni and visiting physicians. Later, by the help of the profession of the state, it is hoped to develop the School of Medicine so that it will be the center of postgraduate instruction—a clearing house for the latest developments in medicine for the profession throughout the state. At present, patients come to the hospital from four sources:

1. Patients sent in from the counties, as authorized by Chapters 292, 293 and 294 of the Laws of Kansas, 1911;
2. Patients sent in by physicians;

3. Patients referred by the dispensary, (usually of local origin.)

4. Patients sent in by the attending physicians from their own practices.

The following rules apply to the admission of patients to the hospital:

ADMISSION OF PATIENTS

County Patients are admitted under the provisions of chapters 292, 293 and 294 of the Laws of Kansas, 1911.

Chapter 292 provides that the “child of any indigent poor person of the state of Kansas, which child shall be afflicted with any deformity or malady that may be cured by surgical operation or by hospital treatment,” may be received by the Hospital upon the recommendation of the county board of health.

Chapter 293 provides that any indigent poor person, resident of the state of Kansas, may be received by the Hospital for treatment or surgical operation upon the recommendation of the county board of health, if in their judgment or the judgment of any reputable physician, the case is curable, or that such hospital treatment would be of benefit to the patient.

Chapter 294 provides that obstetrical patients that are public charges may be received by the Hospital upon contract with the county board of health.

Applications under either of above chapters should be made upon blanks provided for that purpose.

It can be seen that through the operation of these beneficent laws the physicians of the state will be relieved of much charity work, which though given to the state’s poor uncomplainingly, takes up much time which the busy physician can ill afford to give.

Patients Who Can Pay Hospital Expenses Only will be received upon the presentation of the following statement from a legally qualified physician:

“I hereby certify that I am the physician in regular attendance upon _____, of _____; and that he (or she) is able to pay the hospital expenses but not professional fees. I therefore recommend him (or her) as worthy to receive such care from the staff of the hospital free. (Signed) _____, M. D.”

The directory published by the American Medical Association is used as the standard in determining the validity of the standing of the signers of this form. The minimum cost to such patients is \$10 a week, and \$5 additional if the case is surgical. The patient is to pay the cost of transportation in every case.

Unfortunately, there are no free beds. The legislature of 1919 increased the appropriation for maintenance of the hospital; and it was intended that the amount of this increase should go for the support of free beds. However, the rapidly mounting increase in the cost of maintenance made it necessary to continue as before, charging for each patient admitted, though the charges to clinical patients were not increased.

During the last year 1386 patients were treated in this 65-bed hospital, over 10,000 patients having been treated since the hospital was opened in 1911. Of this number, 1365 were treated at their own expense, the county patients treated being not quite 5% of the total, showing that the county laws as they now stand are ineffective. Iowa and Maryland have similar laws controlling the care of their indigent sick, and the facilities are more largely used and more successful. The laws in these states are like those in Kansas in that officials already existing are used to constitute a Board to determine the fitness of patients to receive treatment, but the state (not the county) pays for the hospital maintenance. This would help very materially if done in Kansas, and would be in keeping with the practice in regard to the insane, the tubercular, and others. In fact, with the single exception noted, the Iowa law was based on that of Kansas. The patients sent in who paid hospital expenses composed the largest number, and the writer would like to use this opportunity to express the appreciation of the faculty to the physicians who have helped the institution in this way.

The patients originating in the dispensary (which had 15,201 visits last year) are discussed in another article in this number.

Many of the staff have shown a great deal of energy and zeal in demonstrating patients from their own practices, when these have been valuable cases, or some unusually good illustration of some clinical point.

These various sources have brought a considerable variety of patients, though some departments have not been as well repre-

sented as others. In some instances, as in psychiatric and contagious cases, no provision has been made for their care. Traumatic and acute cases also have not been well represented. With the single exception of the ward for adult males there has been a waiting list for every portion of the hospital. The facilities for colored patients have been taxed to the utmost, and they have been entirely inadequate. The pressure for facilities for children has been but little less. With the development of the new site and the consequent increase in facilities, the situation should be relieved. This hospital is the only state institution for the care of this class of patients. The insane, the epileptic, the deaf, the blind, and the tubercular are cared for elsewhere. This institution rounds out the facilities for the state; so that some provision is made for caring for all types of sick and the afflicted. However, in order to serve the entire state to the best advantage, the changes noted should be mentioned in the laws mentioned above.

The outstanding feature of the School of Medicine is an enthusiastic and loyal faculty, who have worked hard in order to overcome as far as possible the handicap of inadequate facilities. It is this which has made it possible to use outside facilities and thus give the students a training which has enabled them to compare favorably with the graduates of other institutions and to hold their own in competition with them. It is hoped that with the cooperation of the profession of the state and the liberality of the legislature adequate facilities will be provided for the care of the indigent sick and the education of physicians in the near future.

Medical School and the State

DR. WILBUR N. MASON
SECRETARY OF THE STATE BOARD OF ADMINISTRATION

There are two distinct views of education. One thinks of education as a privilege for a select few, for those who have the money, the leisure and the taste to go to the University and get it. This view represents the University as a spring to which those

who are thirsty enough to need a refreshing draft can come and drink.

The other view represents the University as a great public servant seeking to carry its benefits to the people even when the people do not even know that they need those benefits. In other words, the University is thought of as an artesian well that bubbles up its crystal waters and overflows until it refreshes all the region round, making man and beast and landscape to rejoice.

Here is where the Medical School and a great Hospital find their big field of work. The health of the community is one of the greatest assets of a state or nation. A sound body is essential to a sound and sane mind. A trained physician is a public benefactor as truly as is the man who founds a library or builds a church, for he contributes to the well-being and happiness of the community. The state can do no better service for its citizens than to train an adequate supply of capable doctors, for this provides not only for curing the ills of men, but also provides counsel and guidance in conserving health so that people will not need to be sick. Their energies will thus be free for some worthwhile and constructive service in the world.

Moreover, a great hospital is a center for the release of the sick and disabled from ills that prevent them from doing their real work in the state. A crippled child when restored to health becomes for years a benefit rather than a drag on the community life. A sick man not only robs the state of his own service but requires the service of several others to care for him though all of them should be making some useful contribution to the community life, if sickness did not hinder them. Hence, the state is doing a big and beneficent work when it builds and maintains a great hospital to cure the ailments of its citizens.

Here is Rosedale's field of opportunity. A big Medical School training men and women as physicians to serve the state in preventive and in curative medicine; a great hospital whose doors swing bothways—inward to admit the ailing, and outward to

release the well who go back into the community to do some worthy work. This is as fine service as any institution can render. It is the point of contact between the University and all the people of Kansas. As Rosedale measures up to this big task it achieves the high purpose of a real Medical School and a real Hospital. Kansas needs such service. No other institution in the state has such a field, if Kansas will provide funds and equipment for its work. The Board of Administration believes that the new site, a new hospital and a new program—if approved by the Legislature—will bring a new day to Rosedale in its service to the State.

R

The Case of the Medical School and the State of Kansas

CHANCELLOR E. H. LINDLEY

"The first Wealth is Health." The cost in Kansas of preventable illness and the persistence of physical handicaps among our children totals a huge sum each year. **A modern medical school is the best and cheapest guarantee of health and physical efficiency of a commonwealth.**

Investigation shows that Kansas is not training a sufficient number of physicians to supply her needs. The Medical School of the state should be adequately equipped to furnish a sufficient number of physicians in accordance with the highest standards. This calls for expensive laboratory, dispensary, and hospital facilities.

The University of Kansas has accordingly adopted a plan for a new plant on the new site at Rosedale. This plan embodies the best experience of hospital and architectural experts. The cost will probably reach three million dollars. The State will be asked to build these needed structures as rapidly as possible, probably within ten years. Properly financed the Medical School is now in position to become one of the leading institutions for medical instruction and research.

The State of Kansas needs this service for the following reasons:

1. The Medical School of the University of

Kansas should supply highly trained physicians for every bedside in Kansas where there is illness. The best medical service should be within reach of all our citizens.

2. The Medical School seeks to encourage the prompt removal of the physical handicaps of childhood and youth. Crippled children, children with crossed eyes, defective vision, with adenoids, children undernourished, can be made whole. Wherever the state has provided adequate medical education these handicapped children are not neglected. How many are in Kansas today?

3. The Medical School wishes to give more efficient support to our State Board of Health in carrying forward its splendid program of preventive medicine. The diffusion of sound information and the teaching of right habits of living require physicians of modern training and public spirit, working in co-operation with organized health agencies. The experience of leading states proves that a right health program for all the people cannot fully succeed without the service of a strong and aggressive medical school supported by all the people.

4. Free hospital service in difficult cases for the afflicted is an important part of the program of the Medical School.

5. The clinics and other resources of the new Medical School would be, as now, at the service of all physicians of the state, thus enabling them at small expense to keep abreast of the advances in medicine and surgery.

6. The thorough training of nurses by the University Medical School will insure a reasonable supply to meet the great and growing demands of the state in this field. Without a first class medical school it is impossible to have many first class nurses.

7. Medical research is imperative in the fields of public health and sanitation, no less than in the realm of individual diseases. The opportunity for research afforded by a great modern plant will more and more attract to Kansas gifted research men. The discoveries made by one such leader might well save to the state more wealth than the entire cost of maintenance of the Medical School.

Michigan, Minnesota, Illinois, Wisconsin, Iowa, Nebraska, and many other progressive states are committed to large programs of medical education, in comparison with which the program of Kansas is conservative. What will Kansas do?

R

The New Site and the Steps Taken for Its Development

MERVIN T. SUDLER, M. D.

The Medical School has secured a new site in Rosedale through the generosity and interest of citizens of Rosedale, the medical profession of the state, the medical faculty, alumni, and other friends of the institution, who raised \$65,000 for its purchase, \$33,000 being voted in bonds by the City of Rosedale.

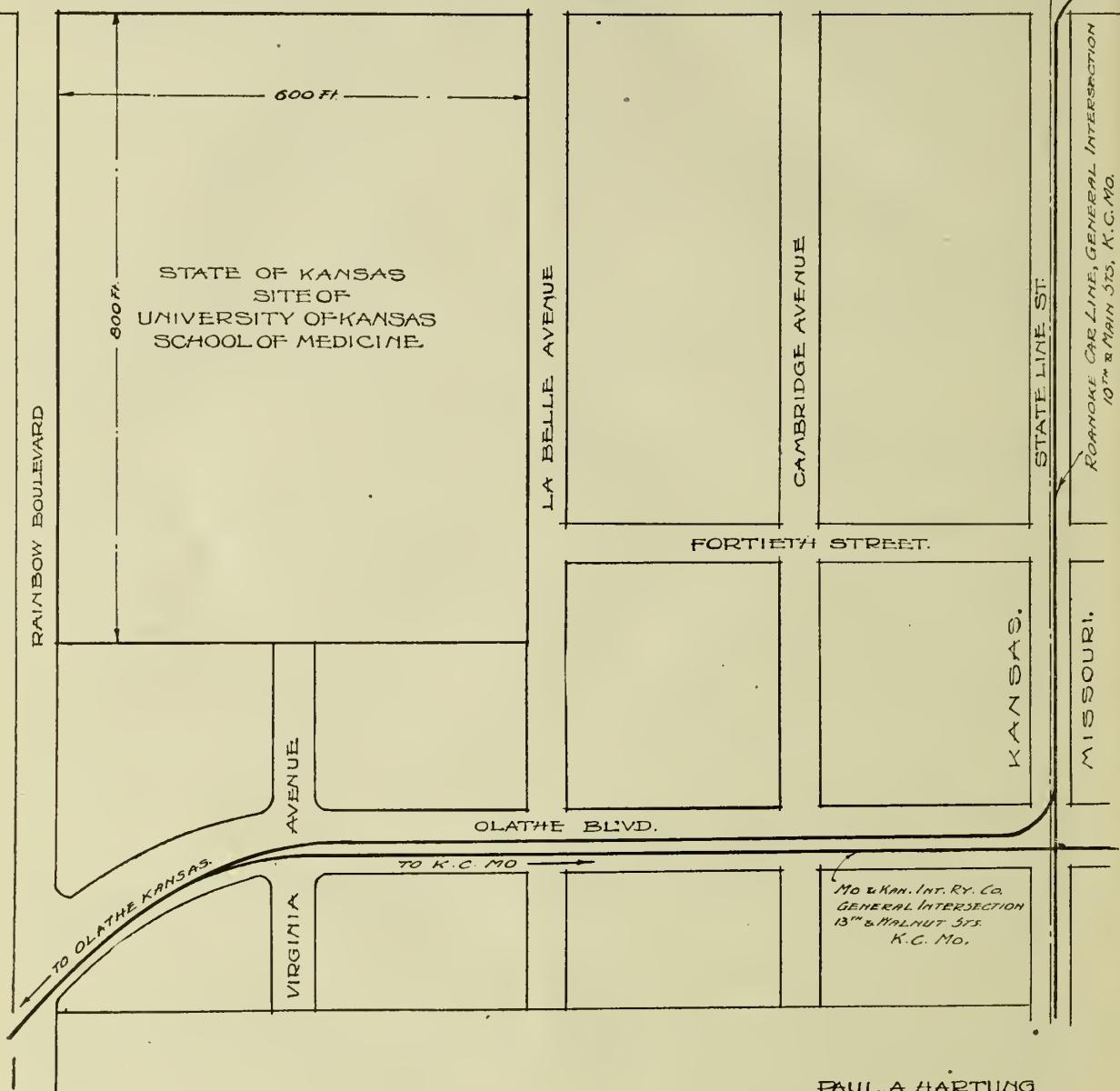
The location is almost ideal in its relation to metropolitan areas; it is in touch with four car-lines and but a few blocks from a fifth; the Thirty-ninth Street car-line in its northern boundary, the Roanoke car-line two blocks away; and the Olathe interurban less than a half block distant; and the Rosedale car-line but a few blocks from the site. The Olathe interurban will haul all freight; and this will mean a great saving in transportation of such items as coal and building materials.

The new site has an area of 12 2-3 acres. It is beautifully placed, has many fine shade trees, and has aroused the enthusiasm of all who have viewed it. Paving is completed on three sides and all improvements are in

After the acquisition of this site, steps were taken by the Governor and the legislative committee, with the Board of Administration, to make proper plans, not only for the building to be erected with the \$200,000 appropriated by the last session of the legislature, but looking into the future. The state is very fortunate in having as the head of its department of architecture, Mr. Ray L. Gamble, a very able and careful architect, with an excellent staff, who have made provisional studies. When these were well developed, Mr. Ralph B. Seem, Superintendent of the Billings Hospital of the Uni-

39th ST. CAR LINE INTERSECTING ROCK HILL, COUNTRY CLUB
SUNSET HILL & ROANOKE CAR LINE.

THIRTY NINTH STREET.



Map showing the surroundings of the new site. This site contains 12 2-3 acres, and was purchased at a cost of \$65,000. It is almost ideally located in regard to the urban population.

ROANOKE CAR LINE, GENERAL INTERSECTION
10th & MAIN STS., K.C. MO.

MISSOURI.

ROANOKE CAR LINE, GENERAL INTERSECTION
10th & MAIN STS., K.C. MO.

versity of Chicago, who has had a wide experience in developments of this character, was employed as a hospital consultant to arrange the relations of buildings and the details of their interiors. As a final assurance that the state's money would be expended to the best advantage and mistakes avoided, and with the conviction that the best was none too good for Kansas, the firm of Coolidge and Hodgdon of Chicago was employed to review the plans and lay-out. This firm has developed a number of teaching hospitals and institutions of similar character. At present, they are in charge of the construction of the Medical School building at Harvard, the Billings Hospital, the new Lakeside Hospital in Cleveland, with a projected expenditure of \$10,000,000, Rochester, New York, Nashville, Tennessee, and buildings of the University of Nebraska.

With the acquisition of a site which can be shown without apology and with carefully studied plans for future development, prepared by competent men, it is hoped that a new era of progress is before the School of Medicine of the University of Kansas; and that it will soon secure facilities equal to those of surrounding states.

R

The Architectural Problems Involved

RAY. L. GAMBLE, STATE ARCHITECT

In planning the new State Medical School we have been confronted with a great many problems and difficulties, the most of which have, after months of study been, as we believe, successfully solved.

In making the general layout of the group of buildings and general arrangement of the administration building Dr. Ralph B. Seem and Architects Coolidge & Hodgdon of Chicago, specialists in hospital and medical school planning, have been employed as consultants to advise the Board of Administration and State Architect. Acting in conjunction with them the State Architect has prepared the general plan as shown. Plans have also been made for the administration building.

What appeared at first to be a considerable

difficulty was that the site of the new institution was far from level, having a difference in elevation in the 800 feet length of forty-five feet. However, in planning the institution advantage has been taken of this by placing the ward buildings and administration building on the highest part of the ground and the power and heating plant on the lowest part. Also, with some grading, the dispensary building being placed on a lower level than the ward buildings, will have the main floor one story lower, thus making the entrance for students and patients nearer the level of Thirty-ninth Street.

This arrangement will produce a very attractive and dignified appearance on account of the elevated location of the main buildings and, from an engineering standpoint, excellent drainage of condensation from the heating systems back to the heating plant and consequently a good circulation will be provided in the heating system.

Another problem to be worked out was to provide close connections between all of the buildings so as to reduce lost motion and long travel from one building to the others to a minimum.

This has been very successfully accomplished. The dispensary, which is also the laboratory or school building, is in close connection with the ward buildings so that students can pass directly from the laboratory building into the ward buildings and operating room section, where they will receive instruction and information by direct observation of medical and surgical practice.

The administration building is also directly connected with the corridor of the ward buildings as well as with the dispensary and laboratory and the library, being placed on the second floor of the administration building, students from the laboratory building will have close and direct access to this.

Another problem was to arrange the service building with close connection to the ward buildings and at the same time have a kitchen entrance for delivery of supplies separated from the other buildings as far as possible. The service building will con-

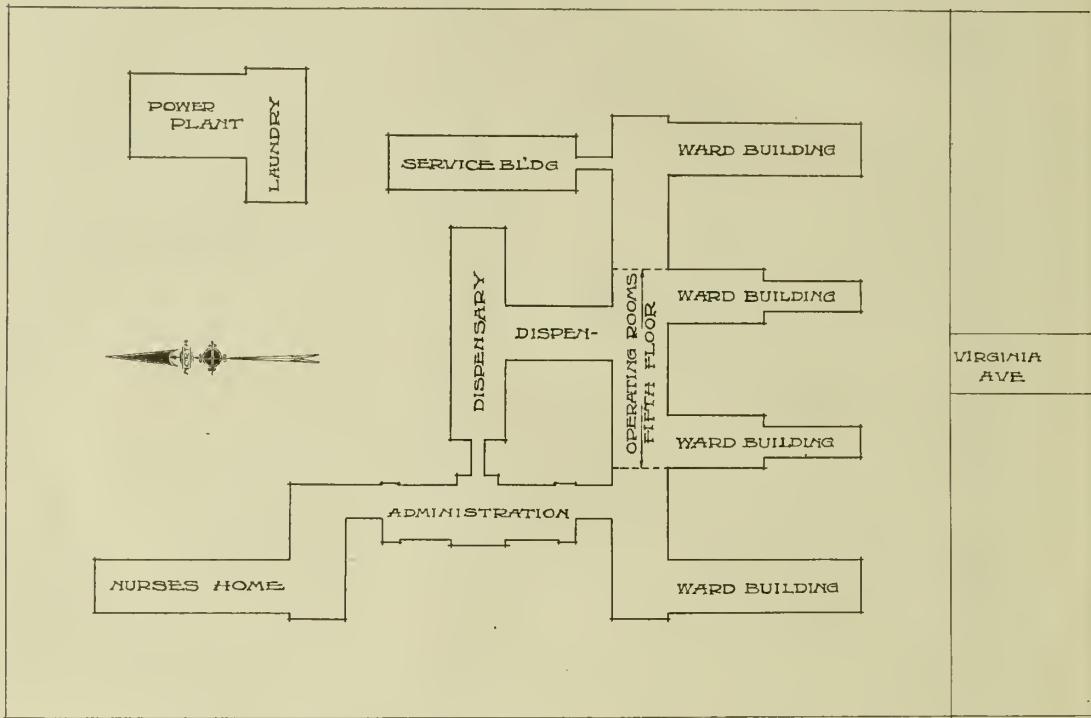
PLOT PLAN
OF THE STATE SCHOOL OF
MEDICINE, ROSEDALE, KAS

LABELLE AVENUE

FORTIETH
STREET

THIRTY NINTH STREET

VIRGINIA
AVE



RAINBOW BOULEVARD

Plot Plan officially adopted September 29, 1920. The total development will care for dispensaries, class rooms, library, laboratories, and 500 hospital patients: half of this is needed at present. Administration Building will be erected with the appropriation of 1919. The Legislature of 1921 will be asked for appropriations for the Power Plant and Dispensary Building.

tain the main kitchen, store rooms and dining rooms and is connected with the corridor of the ward buildings on the end opposite the administration building. A service driveway will approach this building from the east or LaBell Avenue. A spur track from the Strang Line will be run to the service building and power house for the delivery of cars of supplies and coal.

The main approach to the dispensary and laboratory building for students, patients and ambulance will be from the north or Thirty-ninth Street and it is planned to have three entrances to this building on the north side, one for students, one for patients and one for the ambulance entrance.

A driveway and parking space for doctors' and employees' cars will also be provided on the north side.

A large building is to be provided for nurses. This is somewhat separated from the other buildings but is directly connected with the administration building.

One of our greatest difficulties is the fact that we are starting an entirely new institution that would cost, if completed at this time, approximately three million dollars. We have an appropriation to start this institution of only two hundred thousand dollars which is not enough to construct the smallest of the main buildings, which is the administration building.

Probably only comparatively small appropriations for the construction of these buildings will be made for each biennium. This will necessitate constructing, probably, one building or a part of a building at a time which will extend the period of construction over 15 or 20 years time. This necessitates making temporary arrangements in each building constructed to care for the different departments required to operate the institution and these must be made with a view to remodeling for the permanent arrangement in the future.

This is being done in planting the administration building. This building will be used temporarily as a hospital, dispensary and service building as well as an administration building and will contain rooms for

resident physicians, nurses and employees. This necessitates studying out two plans, one for the permanent arrangement and one for temporary use.

In designing the first building we have had to consider the entire group of buildings. These are all connected so as to form practically one large building. Looking into the future and considering the purpose of the institution, which is partly school and partly hospital, we have endeavored to make the design fairly plain and business-like with a view to reasonable economy in construction of the future buildings as well as the first building.

By

How the Medical School can Best Serve the Interests of the Medical Profession in Kansas

C. KLIPPEL, M. D., PRESIDENT OF THE KANSAS
MEDICAL SOCIETY

In my opinion our medical school could in no way serve the medical profession of our state in any other way as effectually as by establishing and maintaining a strong, well managed medical and surgical clinic. This would attract more doctors, especially among the younger members of the profession, to the school than any other advantage that the school might offer. It would invite the graduates to go back and visit their Alma Mater whenever time and opportunity would permit.

In years past doctors have gone and at the present time are going to the larger cities and spending months at a time to avail themselves of the advantages for clinical training. If our medical school could offer an adequate amount of clinical material to make a clinic attractive, there is no doubt in my mind that it would be very largely attended. Most doctors, like all other classes of people, take pride in their home institutions and for that reason would visit this clinic and help to make it a success.

One feature to make the clinical cases of special interest and add very materially to the value of information that it may impart, is by the application of modern laboratory methods in every case where they can be

used. This would apply to surgical as well as medical cases. A careful examination of the blood, of the urine and of the alimentary contents in all cases that cannot be made out by clinical examination should always be resorted to. There is a very wide field of usefulness for a well managed and equipped laboratory in every community, but especially would this apply where a truly scientific course of medicine and surgery is being offered.

In addition to a well appointed and properly equipped laboratory it would be necessary to have first class hospital advantages, and at this point we would be up against the all important matter of financing these institutions. The people of the state of Kansas take pride in our State University, Normal Schools and Agricultural Schools, and these schools have been of immense benefit to our young people who are striving to educate themselves and thereby become equipped to meet the responsibilities of life and be able to deal intelligently with matters pertaining to their chosen occupation or profession.

Our legislators in the past have given fairly liberal financial support to the institutions above mentioned and if the people could be properly impressed with the importance of our medical school, it is my opinion that we could get the necessary appropriation to finance an institution as above referred to. I would advise that every physician make it a point to promote the interests of our medical school in his community by informing the people that we have such an institution and acquaint them with the necessity of maintaining it. The people should be brought to realize that their health is of really as much or more importance for an efficiency in an economic way than is their education along lines of agricultural and professional training. If we, as medical men can make this matter thoroughly understood I believe that our medical school can be brought up to a high standard and its usefulness to the profession be assured and maintained.

How the Medical School Can Best Serve the Interests of the Medical Profession of Kansas

BY D. W. BASHAM, M. D., F. A. C. S.

Our State University is now one of the great and much honored institutions of learning in the country.

The University of Kansas is fulfilling its highest mission to the youth of the middle west as is amply evidenced by the great number who have gone forth from her halls to all parts of this broad land to engage in the successful pursuit of the highest aims that incite the activities of men and women.

If the academic, pedagogic, and legal departments enjoy full facilities for the full performance of their work the medical department should also be placed in condition to meet its full requirements. By full requirements is understood that if a young Kansan desires to prepare for a medical career he should be able to do so in our own university. It is not to be insinuated that the medical student may not do well in the university under present conditions; this would be a manifest injustice to both the school and the student, for we have many excellent young men who have completed their course in the home school. While this is not to be disputed, on the other hand, most of our youth who are ambitious for the best of facilities have found it necessary to go beyond the borders of our state to complete their training in medicine. Others who have spent one, two or three years in our own medical school have preferred to go to some eastern school for the finishing year. This is not as it should be, for it serves to discredit our own medical school and the university of which it is a part. It is to be remembered that Kansas City, Kansas, and Kansas City, Missouri, gave up their medical schools that the university of Kansas might, without opposition, build a magnificent and wholly efficient medical school to supply the wants not of Kansas alone, but all the neighboring states. Some of the schools which were discontinued under these conditions were in good financial circumstances

and were doing good work, but, realizing that one superefficient school would be of far greater service to the medical profession and to the public in the end, they were willing to discontinue those long-well established and very creditable institutions to remove opposition. This was done in the hope that the medical department of the University of Kansas might evolve one perfectly efficient school of medicine out of the combined resources of the several medical schools thus given over with such a generous purpose.

Let it be said once more that no aspersions whatever are to be cast upon our present school or any of its perfectly splendid faculty. The thing at issue is that if our medical school is to rise to the dignity of genuine service to the rapidly advancing science of medicine and medicine as a profession it is our duty and the duty of the state to build a great medical school with hospitals and other appurtenances necessary for the proper training of medical men. These are the indispensables in connection with the creation of such a school as we must have if we hope to serve the best interests of the profession of medicine and that of the public who are at last the real beneficiaries.

Of all vocations possible to man or woman there are none more noble or useful to human kind than that of medicine. The commonwealth can do no better service to the people than to provide the necessary means and measures for the proper training of those who must be entrusted with their health and physical welfare.

What Crotona was to ancient Greece let Rosedale be to modern Kansas.

By

The Medical School Dispensary

THOMAS G. ORR, M. D., CHIEF OF THE OUT PATIENT DEPARTMENT.

The dispensary and hospital occupy similar positions in the Medical School unit. Without either the School would be incomplete. Both are essential for the efficient teaching of students. Both should alike serve its state and its community. To accomplish its purpose each must keep pace with the other in buildings, equipment and personnel.

Dispensaries are becoming more important as teaching centers for both students and physicians. Material such as a dispensary affords is indispensable for the proper training of the undergraduate in medicine. This is equally as true in the case of the graduate. It is in this department that a medical school should have some of its ablest and most progressive teachers who will keep themselves informed in the most modern methods of diagnosis and treatment. Too much attention cannot be given the student in his care of out-patients. It is here that he learns history taking, prescription writing, physical diagnosis, laboratory diagnosis, minor surgery, dressings and the general methods of handling patients. He has, in the dispensary, an opportunity to apply his learning and be safeguarded from mistakes by his instructors.

The Dispensary of the Medical School at Rosedale is there for two purposes; viz, to serve the State's poor and to teach the State's students and physicians. To do the latter it must be maintained at a high standard and if a high standard is maintained the poor and needy will surely receive the treatment due them. There are, without doubt, many physically and mentally defective patients in the State that could be materially benefited by treatment in the Dispensary. When the new Medical School buildings are constructed there will be installed a complete workshop for the making and preparing of braces, splints and jackets for crippled children. There seems to be a crying need for the care of these patients in this State and the Medical School intends to provide for them. It is hoped that this service will make many unfortunates self-supporting and convert these State liabilities into State assets.

We have ever present with us the difficulty of determining which patients deserve free treatment, a problem that confronts every free dispensary. Many times patients will deliberately lie about their financial circumstances and until we have a well established Social Service Department it will not be possible to eliminate those that are undeserv-

ing. We are conscious of the fact that to treat patients free who are able to pay is unfair both to the State and to the Medical Profession. Every effort is being made to eliminate the evil and we ask the co-operation of medical men when cases are known to them. There are patients, at times, that become somewhat incensed when questioned about their ability to pay a physician and reply that the Hospital or Dispensary is a State institution and for that reason and because they live in the State and pay taxes they should be treated free. Of course such an attitude cannot be tolerated.

With the growth of the Medical School the work in the out-patient department will offer excellent opportunities for the physicians of Kansas to "brush up" on their medicine. The University of Kansas Medical School is a State School erected and maintained for the betterment of medical standards in Kansas.

R

The First Annual Home-coming of the Alumni

DONALD RAY BLACK, M. D.

The first annual home-coming clinic week of the Medical Alumni of the University of Kansas and Affiliated Schools, was held November 11, 12, and 13. It was a great success, a large number of the alumni returning to their old school.

Clinics were begun at Bell Memorial Hospital at 9:00 a. m., November 11, Doctors Sudler, Orr, Francisco, and Hall gave surgical clinics, followed by Dr. Bohan, who gave an interesting medical clinic.

A luncheon was served in the hospital dining rooms, after which all were taken in motor cars to view the beautiful site for the future medical school and hospital. At 2:00 p. m., Dr. Skoog gave an interesting neurological clinic in the dispensary building. At seven o'clock, seventy of the old and recent graduates met at the Muehlbach Hotel for the much-talked-of dinner; and such a dinner! I think every one present heaved a sigh of relief when the cigars came. Every one was so busily engaged in talking over old college days that it was with some difficulty that Dr. Francisco, President of the

Medical Alumni, succeeded in quieting things sufficiently to announce the first speaker.

Dr. George M. Gray gave an excellent talk on the old "P. & S." followed by an equally interesting talk by Dr. Longenecker. Then came Dr. C. Lester Hall, who was immediately followed in turn by Mr. Barrier, Mr. Gamble and Mr. Penny of the Board. Dr. Sudler then welcomed the old graduates and told some of the difficulties through which the school had passed and some of the opportunities which will be before us when the new buildings are erected upon the new site.

Last, but not least, was the wonderful talk from our new Chancellor, Dr. Lindley, who told us that our new outlook and possibilities, he had absolutely no doubt that the University of Kansas School of Medicine would rank with the best.

The next morning, November 12, excellent clinics were provided at St. Margaret's Hospital.

We all were very much pleased with the enthusiasm displayed at our first Home-coming Clinic; and feel confident in saying that next year we shall be in need of a new hospital to accommodate the big bunch of fellows who will crowd in to get some of the new spirit.

R

The Use of Arsphenamine and Related Compounds

Many therapeutic perplexities remain after nearly a decade of trial of the type of compound which Ehrlich introduced. It is well for the practitioner to realize this, especially when expert workers still make an appeal for conservative interpretation. Arsphenamine has apparently made it possible or even probable, but only to the inexperienced has the cure of syphilis been made absolute and inevitable. Even the composition of arsphenamine and neoarsphenamine is not fully known, and the control of the products by the government is important. It should be borne in mind also that neoarsphenamine behaves differently in the animal organism from arsphenamine, and should not be regarded simply as arsphenamine in a convenient form for administration. The various brands of arsphenamine and neoarsphenamine made in the United States compare favorably as to toxicity with those made abroad (Jour. A. M. A., Oct. 9, 1920, page 1005).

BELL MEMORIAL HOSPITAL CLINICS**Clinical Pathological Conference of Dr. H.
R. Wahl****BRAIN TUMORS**

The first case J. A. came to the hospital complaining of headache and pain in the left groin. His age was 40. He was employed on a poultry farm. Two months before admission he became subject to "spells" during which he fell in a stupor from which he was not easily aroused. These attacks would last 2 to 3 hours followed by apparently complete recovery. He had headaches for four years. He gave a definite history of a chancre and gonorrhea 10 to 12 years ago. The history was indefinite and difficult to elicit. There was considerable mental deterioration in the past two months. Little was found on physical examination. He was in the hospital only a few days before his death. The knee reflexes were absent. The pupillary reactions were sluggish. He responded to questions only after repeated urging and then the answers were often incoherent. There was no vomiting, no disturbance of vision and no localizing symptoms or signs. The drowsiness soon developed into a coma, followed by inability to swallow, incontinence of urine and feces and death. The Wassermann test was negative in both the spinal fluid and in the blood.

The clinical diagnosis was cerebral syphilis. This was based largely on the clinical history and findings even though not corroborated by the Wassermann test. The possibility of brain tumor was also suggested but not considered probable.

Inasmuch as the main interest at the post-mortem examination was in the brain, lesions in other organs being unimportant, we shall confine our discussion to the cerebral findings. There was a moderate increase in the cerebrospinal fluid. This is the brain of this case. You note that its external appearance shows nothing unusual, except flattening of the frontal convolutions, especially on the right side. The brain tissue over these areas is softer than usual. On opening the

lateral ventricles we find them moderately dilated and almost filled with bloody fluid. There are no blood clots. Protruding into the apices of the lateral ventricles especially on the right side there are soft spongy hemorrhagic masses. On making frontal sections thru the brain we find that a soft grayish pink mass has almost entirely replaced the anterior third of the corpus callosum and has obliterated the normal markings in this area. We note further that this tumor tissue is very poorly outlined from the surrounding brain tissue and that it is difficult to tell where the tumor tissue ends and the normal tissue begins. We also see that along the anterior edge of the tumor there are blood clots which on the right side reach the cortical layer of the frontal lobe. In other words almost reach the surface. Posteriorly the tumor extends almost to the level of the optic chiasma.

Histological examination of the tumor shows the structure of a typical glioma. It is composed of small deeply staining nuclei embedded in a fibrillar glial matrix. The glial fibres arise from the cytoplasm of the cells. There is considerable hemorrhage and necrosis.

The second case F. F. entered the hospital with the complaint of "Inability to use arms and legs well." He was 40 years of age and was under observation in the hospital several weeks before death. The onset came on gradually about seven weeks before admission with a numb sensation in the toes and fingers and progressive weakness of the muscles. The extremities always felt cold. The patient had difficulty in walking and feeding himself. There was no pain in the legs, no headache, no vomiting and no visual disturbance. Lost 20 pounds in weight in the last seven weeks. There has been no bladder trouble. The patient stated that a year before he had had a growth removed from his nose six times which his doctor told him was a "carcinoma." He also stated that he went to the Mayo's for radium treatment. There is no specific history.

On physical examination his pupils were irregularly dilated. The deep reflexes were

absent. There was a very marked Romberg. There was an iritis. There was marked incoordination of the muscular movements. Weakness and numbness were the most striking complaints. On examination of the nose an atrophy of a turbinate bone was noted suggesting to the rhinolaryngologist that a turbinectomy had been performed. No evidence of a tumor was noted. The urine was negative. The blood showed a slight anemia. The spinal fluid was under great tension (260 plus). The cell count was 44. Nonne's test was positive. The Wassermann test was positive in one out of three examinations and negative in the blood. The colloidal gold test gave the typical paretic curve. There was a papillary edema of the optic disc. Under treatment with KI and salvarsan the patient's condition improved temporarily. Later dizziness appeared. The temperature was normal except a few days before death when it went up to 103. There was no diminution of mentality. Extreme weakness preceded the patient's death.

The clinical diagnosis was in doubt, but tabes and general paresis were considered the most probable. The disturbance in the muscle sense suggested the former and the colloidal gold the latter, though there was no mental deterioration. The clinicians did not feel that the increased intracranial pressure, in the absence of any other cardinal signs or symptoms was sufficient to justify a diagnosis of a brain tumor.

At autopsy there was a terminal bronchopneumonia and an acute splenic tumor. There were no other important findings except those in the brain. On removing the dura there was a large excess of cerebrospinal fluid. The condition of the brain is shown here. You will note that on the under surface of the frontal lobe is a lobulated, well-encapsulated, tumor mass, measuring 8 by 5 by 4 cm. I can pick this mass up readily leaving a lobulated bed or impression on the inferior surface of the left frontal lobe. This mass was but loosely adherent to dura, the point of attachment being indicated by this small area of roughness about 2 cm. in diameter. The bed of the tumor is composed

of compressed convolutions. In the deepest portion of the bed there is a small opening communicating with the apex of the left lateral ventricle. On section of the brain we find however that this opening leads into a cystic cavity which does not communicate with the ventricle. The olfactory lobes are not recognizable. The tumor bed extends onto the right frontal lobe. The tumor itself is lobulated in structure; is fairly well encapsulated and easily shelled from the cerebrum. Its individual lobules are held together by bands of connective tissue and present a varied appearance. Some are firm and grayish white in color, others are more friable and grayish pink. Others show hemorrhages and necrosis, giving a patchy red and yellow color. Nothing indicating a primary tumor in the nose or elsewhere was noted.

The histological examination of the tumor tissues shows a very atypical cellular mass with a tendency for the oval and rounded cells to group about blood spaces of which there are a large number. There are many necroses and hemorrhages. There is no hyaline change or calcification. The tumor is undoubtedly a perivascular endothelioma of the meninges of the frontal lobe.

These two cases present several points of more than passing interest. They are illustrations of the frequency with which cerebral neoplasms are undiagnosed clinically and often even unsuspected. They usually occur in one of the so-called silent areas of the brain of which the frontal lobe is probably the most common. In neither of the above cases were there more than one of the cardinal symptoms of cerebral neoplasm. Neither case showed a history of vomiting, visual disturbances or localizing symptoms. It is often forgotten that a lesion in a silent area of the brain gives few and obscure symptoms. One of the cases (First) had marked headache and mental deterioration but no unusual increase in intracranial pressure. The mental disturbance is explained by the destruction of the association fibres in the corpus callosum. In the second case there was no headache but marked increase in the in-

tracranial pressure. In other words the absence of headache, vomiting or eye symptoms does not exclude a brain tumor.

The correct diagnosis of these two cases is not only of academic interest but of great practical importance. The tumor in the first case was deep seated and inoperable. The second, however, was superficial and could have been easily removed, if its location could have been recognized.

There is no definite relation between the size or type of the tumor and the intracranial pressure, nor is there any constant relation between the intracranial pressure and headache. The former was more marked in the second case yet there was no headache.

These two cases are examples of the most common tumors found in the brain—the glioma and the endothelioma. The latter is relatively benign, is encapsulated and easily shelled out and is therefore the type in which the operative result is good (better than that for any other type of brain tumor). The glioma is the most frequent tumor found in the brain. It is usually deeply situated, has a characteristic diffuse growth, tending to infiltrate and replace the cerebral tissue, its edge is difficult to determine and it is inoperable. (In a few cases it has been successfully removed). The origin of these types is very different. The glioma arises from the neuroglia or supporting tissue of the central nervous system. The endothelioma arises from the blood vessels or from the meninges. Most of them arise from the anterior fossa, or from the falx.

The endothelioma is usually a slow growing tumor in the brain, does not infiltrate the brain and does not metastasize. It occurs in two forms—the psammoma which is characterised by undergoing hyaline degeneration and calcification giving the gross impression as if it contains granules of sand; and the perivascular form to which the second case belongs.

The glioma is a soft tumor which tends to obliterate the normal markings of the brain. It is frequently the seat of hemorrhages and necrosis. The cell is called a "spider" cell because of the slender cytoplas-

mic processes which radiate out from it and form the glial fibres—its most characteristic element. It occurs more commonly early in life (though it may occur at any age) and often is preceded by a history of trauma.

By

Outpatient Clinic of Dr. Robert C. Davis

1. Carcinoma of Stomach with Pyloric Obstruction.

2. Cardiospasm.

3. Duodenal Ulcer.

Before beginning the discussion of the cases presented today let me give a foreword in the diagnosis of diseases of the upper gastro-intestinal tract concerning the history, findings and interpretation which I hope to bring out by the cases presented.

First, and most important, is the history. It is only by a careful and painstaking history that we are able to reach reliable conclusions in any of the obscure chronic diseases; but a thorough and careful history is more important in diseases of the upper digestive tract than perhaps any other part of the body, for it is at times that we must depend entirely upon their interpretation.

Second, the interpretation of the history is very important as we will show later in two of the cases presented. Because certain "time honored" symptoms in the diagnosis of a given condition are not present, it does not necessarily mean that we can exclude the disease. Then occasionally our laboratory findings do not at all corroborate our clinical interpretation. Then it is after carefully reviewing the case that we pay more attention to the clinical findings. Now I do not wish to be misunderstood and condemn or lessen the importance of laboratory findings but occasionally we have cases in which the laboratory findings must be disregarded. I also wish to bring out the point that a diagnosis cannot be made by merely sending the patient to the laboratory and x-ray. It is by the careful cooperation of all working together that reliable results are obtained.

1. Carcinoma of Stomach.

H. L. No. 20489; male, age 68, married.
Entered dispensary Nov. 16, 1920.

Chief Complaint: Soreness in right upper abdomen.

Present Illness: Started last May, 6 months ago, with a pain in epigastric region and numbness in hands and feet. The pain lasted only for two or three days and then disappeared. Had teeth all extracted at this time and numbness in extremities all disappeared. Has had no pain in any part of abdomen. Occasionally has a little belching but no symptoms referable to stomach as burning, pain, fullness, etc. For last two weeks has noticed a tenderness in right upper abdomen on pressure and a sense of fullness in epigastrium. Never at any time any disturbances of appetite. Eats any and all things and appetite has remained good. Has lost 25 pounds in weight in last 6 months. Took a vacation late this summer and regained 10 pounds. Is at present weak and tires easily. This for the last month. Nocturia, 1 to 4 times. Lately has belched some food material when stooping over. Last night vomited for the first time. Vomited at least "one half-gallon" of dark heavy fluid in which was two slices of orange which patient bring to the dispensary with him. He says that it is at least three weeks since he has eaten any orange. Other history is unimportant.

Physical Examination: Small poorly nourished anaemic man, in which all subcutaneous fat has disappeared. Eyes react to light and are regular and equal. No enlarged cervical or clavicular glands.

Lungs: Breath sounds diminished but no rales. **Heart:** Regular, apex outside mid-clavicular line, no murmurs.

Abdomen: A fullness in upper abdomen which upon palpation reveals a mass over stomach region which is soft and shifts with change of position. To right of midline a rather hard indefinite mass is made out which is tender upon pressure. Liver below costal margin and palpable. Seems to be pushed slightly to right. Marked persistaltic waves, one to right and another to left. Other examination negative.

Laboratory Examination: Blood: Reds, 3,180,000, Hemoglobin 42%, Whites 10,200.

Differential: Poly 85, L. Lym 12, S Lym 3. Wassermann Neg. Stomach: After test breakfast: Total Acidity 20. No free HCl. Lactic positive. Blood, positive.

X-ray after bismuth meal; A complete obstruction of stomach.

Diagnosis: A carcinoma of the stomach probably upon the lesser curvature which has extended down and obstructed the pylorus; with probably an involvement of the transverse colon.

2. Cardiospasm.

R. P. No. 19343, colored female, age 34, married.

First entered dispensary Aug. 17, 1920.

Chief Complaint: Vomiting and loss of weight.

Present Complaint: Last January, 11 months ago, had Influenza and has not been well since that time. After recovering from influenza started to vomit and has been vomiting daily since that time; in fact has vomited after almost every meal. Never goes more than 10 or 15 minutes after she eats until she vomits. Lately has been unable to eat. Drinks fluids but even fluids cause patient to vomit. Occasionally must stop drinking to vomit. Cold water causes her to vomit. Never vomits sour material, but only the food she has just eaten. At times has an indefinite pain in upper abdomen. Eating sometimes makes it worse while sometimes does not affect it. She is never very sick when she vomits. And has never vomited blood. Is hungry but is afraid to eat because eating makes her vomit.

Past History: Six years ago had a similar attack of vomiting. She says at that time it felt as though food did not enter stomach. Would eat at night and vomit it the next morning. No taste to it. Never tasted sour. This attack gradually got better without any treatment. This last attack much worse than the previous one.

Other history and examination negative except for a little tenderness under the lower end of sternum. Roentgenologist at first reported a stricture at the cardiac end of stomach. This diagnosis was later changed to cardiospasm.

The condition was diagnosed cardiospasm and patient put on atropin treatment. Was last seen Nov. 26, 1920, at which time was again vomiting. Had been out of atropin for four days. Had had perfect relief as long as taking atropin.

3. Duodenal Ulcer.

M. A. No. 17909. White, female age 21, married.

Entered dispensary April 20, 1920.

Chief Complaint: Pain in upper abdomen.

Present Illness: Has been bothered continuously for the last two years with stomach trouble. Has had some trouble for last four years, worse in spring and fall. Pain with a gnawing sensation, and heartburn coming on after every meal. At first 2 to 4 hours now 1 to 3 hours after meals. Pain is burning in character and is relieved always by eating or taking soda. Pain wakes patient at night and she either gets up and drinks a glass of milk or takes soda and is relieved; then goes to sleep. Drinking water will relieve pain for a short time. Feels best when stomach is full. Cannot drink coffee, eat meat, apples, bananas, cabbage, sauer kraut, pickles, vinegar, salads or salmon. No vomiting.

Other history and examination negative except for a point of tenderness in right upper abdomen.

X-ray reports a filling defect in duodenal cap.

This patient was diagnosed duodenal ulcer and was to come into the hospital for treatment. While making arrangements to enter hospital was put upon alkalies, tincture of belladonna and frequent feedings. This relieved patient and she decided not to enter hospital and was lost as far as our records show.

Discussion: The three cases presented show a marked difference in gastric symptoms. They were selected to bring out these symptoms. All cases are not as typical as these selected. But if one persists in obtaining a careful history in all these gastro-intestinal diseases it simplifies a great deal

the diagnosis. The history is, at least, eighty per cent in diagnosis.

Case No. 1 is presented to show that, contrary to the idea of a part of the profession and the laity, we can have large involvements by carcinoma and yet the patient does not vomit. It is usually only when there is involvement of the pylorus with the resulting obstruction that retention and vomiting are common. Another unusual feature of this case was that the patient retained his appetite and was hungry even when the stomach was filled with retention.

Case No. 2 represents a case of persistent vomiting. And it was only explained by a careful history and the response to atropin. The first x-ray report was a stricture of the esophagus, probably malignant. But this was later changed to cardiospasm.

Case No. 3 represents a typical history of ulcer. The pain coming on after meals, so severe as to wake the patient at night but which is always relieved by either eating or by the taking of alkalies. The important thing is the pain that comes on after every meal and that is always relieved by food and alkalies. Another thing that this patient brings out is that we do not get vomiting with duodenal ulcer. We may also have gastric ulcer without vomiting. It is usually as with gastric carcinoma, that the vomiting is a result of a pyloric obstruction.

Besides the cases that come for treatment for gastro-intestinal conditions there are many patients complaining of gastric symptoms that are caused by extra-gastric conditions. These must be carefully studied to be differentiated. But our time will not permit their discussion here.

Additional findings in Case No. 1. On Nov. 25, 1920. This case was operated upon by Doctor Sudler of the Department of Surgery and a large mass found on the lesser curvature of the stomach extending down to the pylorus. Glands and malignant masses were found in the omentum and liver and a mass obstructing the lower part of the transverse colon. Gastroenterostomy was done from which the patient has made a good recovery.

Clinic of Mervin T. Sudler, M. D.**BENIGN HYPERTROPHY OF THE PROSTATE.**

The patient whom we are presenting today is a typical example of an enlarged prostate. He is 64 years old. His trouble began eight years ago, with the urine starting slowly. He now voids every half hour during the day and six or eight times at night. An examination reveals a large amount of residual urine—at times, as much as 40 ounces. There is much pus; and there are some blood cells. Its specific gravity was 1.006 and has increased to 1.018 under irrigation and catheterization. The pus cells and albumen have largely disappeared; so the kidney has not been damaged to the degree that gives a fixed specific gravity. The functional test (sulphophenolphthalein) shows present in 14 minutes. In two hours, 54% of the drug was recovered. The prostate is about double the usual size, smooth, and of even consistency. The systolic blood pressure is 130, the diastolic 80. The blood count shows 4,400,000 red cells, 8,200 leukocytes, and a hemoglobin of 75%. Today we shall open the bladder under local anesthesia, putting in a drainage tube. The second operation *will be done when the incision is clean and granulating in a healthy manner; and the patient's tongue is clean, and his general condition good. Gas and oxygen anesthesia will be used.

Discussion.—So-called "Benign hypertrophy of the prostate" is a disease of advanced age—the patient being usually over 60 years of age. It is a new growth, an adenoma, that ordinarily begins at the posterior edge of the urethra—the so-called middle lobe. The first symptom is the delay in urinating that gradually increases until at times the use of the catheter becomes necessary. After this, the symptoms and pathology are the results of obstruction. The bladder is never completely emptied—there is always some residual urine—the bladder becomes hypertrophied, and trabeculation ensues, the ureters and pelvis of the kidney are dilated; and the kidney

* This procedure was carried out two weeks later. The patient was healed and left the hospital after a total stay of thirty-nine days.

substance is gradually destroyed, the quantity of urine increasing and its specific gravity decreasing. At any stage of this series of changes, infection may complicate the picture or even terminate it. If a catheter is used habitually there is practically always infection and pus. Since the disease develops slowly and intermittently and at an age which endures and is not inclined to seek a radical remedy in the nature of an operation, most patients coming to operation have some of these symptoms well developed and only too many of them present them in advanced stages. Curiously enough, in spite of the damage to the kidneys, the blood pressure is not often greatly increased. Cancer occurs in about ten per cent. and calculi in another ten per cent. About two per cent of prostates are hard and fibrous.

Treatment.—The patient has usually tried to drink as little as possible; so he is given water by having a pitcher and glass placed at his bedside and urged to drink. He is also given five grains of sodium benzoate and ten grains of hexamethylenamin three times a day. The bladder is irrigated with a 1-8000 permanganate solution once or twice daily; and catheterization is employed as often as necessary. Constant drainage by fastening a catheter in place has not been satisfactory. It irritates and causes too much pain.

The urine often changes markedly in character—the specific gravity increasing. The quantity may be reduced. A fixed low specific gravity, as 1.004 or 1.006, mean seriously damaged kidneys. The sulphophenolphthalein* output is correspondingly decreased.

When the urine becomes fairly clear, the bladder is opened under local anesthesia, as in this case, and a drainage tube is inserted. This usually remains tight for about a week. It is left in situ until all sloughs are separated and the edges of the incision are clean and healthy in appear-

* It is difficult to make a prognosis based on the sulphophenolphthalein output as we have one case in which the first appearance was 41 minutes and a scant 8 per cent in two hours. (The drug was given intravenously.) This patient's urine had a specific gravity of 1.004. He died two years later of uremia.

ance. The gland is then enucleated under gas oxygen anesthesia, the space from which it was removed being packed with iodoform gauze, which is allowed to remain forty-eight hours. In patients where the patient comes to operation early and complications have not developed, the entire operation is done at once.

The suprapubic operation was developed by Freyer of London. The enucleation by the perineal route has been developed by Dr. Hugh Young of Baltimore. Dr. Ochsner of Chicago has described an enucleation through a perineal incision instead of a suprapubic. However, a one stage operation is suitable only in those cases where the urine is not infected. The advantage of the perineal operation is that better drainage is secured; but its great disadvantage is that it leaves incontinence as a consequence in a distressingly large number of instances in the hands of the average general surgeon. For the average neglected and infected patient, the treatment as described and illustrated in this case yields the best results.

The dangers following an operation are hemorrhage, uremia, and infection. Three cases of benign hypertrophy have been lost in my experience out of a total of one hundred and forty-two operated upon,—two from uremia and one from hemorrhage.

The greatest problem is to get patients suffering from this trouble to be operated upon early, before pressure and infection have damaged the kidneys; and the bladder has become distended, trabeculated and sacculated.

R

An Explanation for the Antagonistic Action of a Substance, Such as Caffein, to the Action of Anesthetics

Dr. W. E. Burge, Urbana, Ill.:—If one physiological process in the body is more important than another, oxidation is certainly the most important, and, in fact is so important that it is considered by some to be the life of the cell. Stimulants as a rule increase oxidation, while depressants decrease it. Caffein, for example, increases the oxidative processes whereas the anesthetics decrease them. We had already found that whatever increased oxidation in the body

produced an increase in catalase, an enzyme possessing the property of liberating oxygen from hydrogen peroxid, by simulating the alimentary glands, particularly the liver, to an increased output of this enzyme, and that whatever decreased oxidation produced a decrease in catalase by diminishing its output from the liver and by direct destruction. The catalase determinations in our experiments were made by adding 0.5 cc. of blood to hydrogen peroxid in a bottle and the amount of oxygen liberated in 10 minutes was taken as a measure of the catalase content of the 0.5 cc. of blood. In charted results it may be seen that the administration of 0.15 grams of caffein per kilogram into the alimentary tract of a dog greatly increased the catalase of the blood with resulting increase in oxidation, while the anesthetics ether, chloroform and nitrous oxid, greatly decreased the catalase of the blood with resulting decrease in oxidation. The increase in oxidation with resulting stimulation produced by caffein is attributed, to the increase in catalase and the decrease in oxidation with resulting anesthesia, produced by the anesthetics, is attributed to the decrease in catalase. The antagonistic action of the anesthetics is attributed to the fact that the action of caffein or catalase production is diametrically opposed to the action of the anesthetics, that is, caffein produces an increase in catalase while the various anesthetics decrease it. (N. A. R. S. Proceed.)

R

Positive Wassermann in Nonsyphilitic Patients After Intravenous Therapy

Albert Strickler, Philadelphia, and his co-workers advise (Journal A. M. A., Nov. 1920) that a positive complement fixation test for syphilis obtained with the serum of a patient treated with arsphenamin for some nonsyphilitic malady or some obscure disease should be interpreted with great caution and considerable reservation. In view of the fact that there are a number of affections, such as anemia, malaria, recurrent fever, pemphigus, psoriasis and senticemia, in which arsphenamin is recommended as a method of treatment, and because arsphenamin is employed at times in the treatment of obscure diseases and affections difficult to influence as a sort of last resort, it becomes the duty of the clinician and the serologist not to be over hasty or too dogmatic in pronouncing such an individual definitely syphilitic. The authors believe that at times too much arsphenamin is administered in the treatment of syphilis and that this remedy may be responsible for the persistence of a positive Wassermann reaction.

THE JOURNAL
of The
Kansas Medical Society

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The School and the Profession

If we all of us had been as much interested in the development of the medical school as our own interests warranted it is not improbable that the school would have years ago occupied as large or a larger building than the one now planned, on a site equally as desirable as the one recently purchased. That the medical profession has been apparently indifferent to the success or failure of the school is a fact. The reasons for such indifference are not at this time under discussion, nor is it necessary to say that if there ever were any valid reasons they do not now exist.

The medical school has proven itself worthy of the support of every physician in the state and it has also proven its ability to be of great help and inestimable benefit to the profession of the state.

There is perhaps much difference of opinion as to the proper functions of a medical school, but the time is long past when such an institution can properly limit its activities to the education of medical students. Its field of usefulness must have a wider scope than that or it will have failed to meet the larger conception of medical education. Medical education now means, not only the preparation of students for the practice of medicine, but the continued education of those already in practice.

The medical faculty must be constantly teaching and in order to be constantly teaching it must be constantly learning, and the knowledge it acquires must be given not only to the student body but to the whole profession of medicine. It is the medical faculty that must prove the newer theories in medicine and test the clinical observations of the men in the field.

The school must be at the fore-front of medical progress and it must be closely identified with the medical profession in the territory it serves. To an extent at least it must be responsible for the efficiency, not only of the men it graduates, but of the whole profession. A large responsibility and a discouraging undertaking, but one which it assumes when it becomes the sole center of medical education in its territory. In order that the school may be of greatest usefulness there must first be established a more intimate relationship between it and the medical profession of the state; then the school must offer more and better opportunities to the members of the medical profession for improving their knowledge and skill; and finally the medical profession must take advantage of the opportunities offered to a greater extent than has heretofore been the case.

The profession must be taught—or rather convinced—that the medical school can be made to contribute largely to its advancement and supply its greatest needs with the greatest facility and utmost efficiency.

One of our governors vetoed an appropriation for the medical school on the ground that Kansas could not afford the expense per capita for the doctors the school produced. He divided the annual expenditure for the school and hospital by the number of graduates and concluded that Kansas-made doctors were quite too expensive. Since that time the school has been able to demonstrate through its service to the people of Kansas that it has an important function beside the education of students in medicine.

The medical profession has been considerably interested in this service, but as an

educational institution, specializing in medical education, it may be worth while to consider how the school may serve the medical profession particularly, to consider to what extent it may serve us and in what way it may best serve us.

Kansas men go to Chicago, New York and other large medical centers for a few days or a few weeks of clinical instruction. Many of them would continue to go to these places even though the most excellent clinical advantages were offered at Rosedale. There are many however that would very gladly take advantage of any opportunities the Kansas school may offer. It has been suggested that an occasional clinic week be given for the benefit of the Kansas profession. No doubt it would be well attended. But does that offer the greatest service the school can afford? In order that the greatest service may be rendered to the greatest number such opportunities would need to be frequently offered in order to meet the needs and the convenience of the profession. It would be a more desirable plan to open the regular clinics at the hospital and dispensary to any member of the profession who wanted to attend and at anytime he might be able to attend. Clinics conducted for the instruction of students are more valuable to the practitioner than are most of those conducted for the benefit of practitioners alone. It will not be in clinics alone that the greatest service will be given.

Every practitioner, sooner or later, grows rusty in some branches of medicine, some perhaps which are of minor importance in his particular practice, but others in which he realizes the need of greater and more accurate knowledge. His technic soon gets out of date and he finds it difficult to grasp the details of many of the diagnostic procedures now in vogue. All these are taught in the medical school, and taught with careful attention to detail. That is what the practitioner wants—or rather what he should want—and there is no better place to get it than in the class room or the laboratory with medical students.

If every department of the medical school

were opened to the members of the medical profession so that they could go there at any time and for any length of time, and take such parts of the course of instruction offered to the students as they might require, the medical profession would more fully realize the benefits which should by rights belong to it.

In no other way can the medical school so quickly establish that intimate relationship with the profession that is essential to its highest development.

R

Law for the Doctor

BY LESLIE CHILDS

IS A PHYSICIAN WHO TESTIFIES AS A WITNESS IN A JUDICIAL PROCEEDING DISCLOSES CONFIDENTIAL COMMUNICATIONS LIABLE IN DAMAGES TO HIS PATIENT?

In Smith vs. Driscoll et al, 94 Wash. 441, the defendants, Driscoll et al, were licensed and practicing physicians and surgeons and had attended the plaintiff, Smith, professionally. Later Smith became a party to a law suit opposing one Leonard, and the defendants were subpoenaed as witnesses, testifying apparently much to Smith's embarrassment. Thereupon Smith brought the action above named, asking for damage for alleged wrongful disclosure of confidential information acquired in their professional capacity.

The exact nature of the alleged confidential disclosure made by the defendants does not appear in the report, and the case turned on a point of law; but the court, in passing upon the issues raised, discussed the question of a physician's liability in situations of this kind in an able manner, saying in part:

"* * * Is a physician who, while testifying as a witness in the course of a judicial proceeding, discloses confidential communications made to him, or professional information acquired by him while prescribing for a patient, liable in damages to the patient for so testifying? * * * To the ordinary mind it would seem that a physician, while testifying in a court of justice, is in the same situation as any other witness, and his rights and

liabilities are to be determined by the same legal standards that are applied to a witness who is not a physician. We can conceive of no possible reason why the protection which the law, * * * places about witnesses generally, should be denied to a particular witness merely because he is a physician. If this immunity is withdrawn in his case surely the situation of the physician as a witness is not an enviable one. If he is interrogated, and required by the court to answer, concerning confidential communications in his professional keeping, and does so, he will be rewarded for his obedience to the law by being mulcted in damages to the aggrieved patient. If, on the other hand, he considers it to be his paramount duty to preserve in its integrity his obligation to his patient and refuses to testify, he will be rewarded for his professional loyalty by being committed to jail. Manifestly, no such barbarous rule would be tolerated by any system of civilized jurisprudence. * * *

"A physician is not permitted to disclose from the witness stand the communications of his patient made in confidence merely because the information would be relevant and pertinent to the issues involved. Before such testimony may be given it also must be admissible in the particular case. The important issue, therefore, in an action against a physician for divulged confidential communications while testifying in the trial of a case, is whether the testimony complained of was admissible in the case in which it was given and was relevant and pertinent to the issues. * * *

"The complaint here does not set forth the nature of the action in which the offending testimony was given, * * * it alleges that the statements complained of were made over the strenuous and timely objection of appellant. This allegation invited the inference that the testimony was given in response to questions and in obedience to the ruling of the court, in which event respondents would not be liable, even though the testimony were both inadmissible and irrelevant."

The court concluded by sustaining a demurrer to the complaint.

It would seem by the holding in this case which is sustained by the great weight of authority, that before a physician could be held liable in damages to his patient for disclosing confidential communications while testifying as a witness in a judicial proceeding, it would have to be shown that he abused his privileges as a witness in some manner. Witnesses are granted a certain amount of immunity from civil liability for statements made in court, and, so long as the testimony given is relevant and pertinent to the cause, there can attach no civil liability; that the physician enjoys this immunity in common with other witnesses cannot be doubted.

Whether a given interrogatory is admissible, relevant, and pertinent is a question for the court to decide when presented. If then, the physician witness is of the opinion that to answer might involve him in an after dispute, he may avail himself of his privilege as a witness and decline to answer until ordered to do so by the court.

If the court decides that the question is proper and directs him to answer, he may do so without fear of incurring after civil liability regardless of how offending his testimony may be to a third party, this assuming, of course, that in his reply he stays within the record answering in good faith and to the point.

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R

Tuberculosis Clinics

BY CHARLES H. LERRIGO, M. D.

The State Tuberculosis Association is to be congratulated on putting into effect its program for the year 1920. It has conducted very successful clinics in a fair percentage of counties, in pursuance of its avowed policy of carrying the Cure to the patient. Dr. Seth L. Cox, the medical director of the Association has received very valuable assistance from Dr. F. L. Loveland of Topeka and Dr. C. S. Kenney of Norton who have given expert assistance in acting

as consultants in these clinics. It is a great boon to a doctor to be able to have his puzzling cases looked over by one of these specialists and get an expert opinion in as difficult a disease to diagnose as tuberculosis.

The plan of the clinics is that the first in the field shall be the nurses of the Tuberculosis Association, who look over the ground and find known and suspected cases, seeing that they are given an opportunity, through the doctors who happen to be in charge of their cases, to get the benefit of the clinic. When the time arrives, the doctors of the community appear in consultation with the experts of the clinic both as to diagnosis and treatment. Nothing is done without giving the attending doctor full opportunity to discuss the case and decide its merits and the continuation of treatment that is advisable, just as would be done in any consultation.

In as many counties as possible it is arranged that, following the first survey and clinic, there shall be held monthly clinics at which the patients may report progress, may be weighed and measured, and may receive such advice as the case seems to demand. These return clinics are necessary in order to insure the best results, since a large proportion of the cases found are either not proper cases for admission to the State Sanitarium or else cannot be admitted for lack of room.

A striking illustration of the possibilities for good that this work offers is found in the following incident. At one of our clinics a sixteen year old girl presented herself. She was found to have an active case of tuberculosis. The customary advice was given as to home treatment, including absolute rest in bed, nourishing diet, open air, etc. The girl's father was very skeptical of any good result coming from such fads, but fortunately had the intelligence to be willing to give at least a fair trial before turning it down. Three months later the same girl travelled forty miles to a clinic that we were holding in another county to report progress. In the three months she had gained 48 pounds, and her physical examination showed a very

marked improvement in the condition of her chest. This girl might have received the very same advice from her family doctor and simply ignored it; but the fact that she was examined and advised by consultants from a distant part of the state won for the treatment a consideration that was not accorded it so long as it was the suggestion only of the home doctor. That is part of the psychology of the clinic.

R

Etcetera.

It is not always wise to estimate another man's knowledge by comparison with what one thinks he himself knows. Occasionally the other man may be right.

A conversation recently heard on the train went something after this fashion:—"Well sir, I have learned that when a fellow with a cold begins to cough his cold is always worse. If a feller can keep from coughing his could won't be so bad. If you can stop the cough the lungs have a chance to clear themselves out."

Crawshaw (Brit. Med. Jr. 10-23) reports the successful treatment of encephalitis lethargica with hexamine (urotropine). Forty five grains of the hexamine dissolved in 100 c.c.m. of normal saline were given interavenously. This was repeated every other day until six doses had been given. Improvement was noticed on the second day after the first dose and continued steadily until recovery was complete.

About thirty-five years ago there was a physician in Kansas who read a paper at one of the Medical society meetings and the paper was entitled "My First One-Thousand Cases of Placenta Previa."

That there is a close relation between phlyctenular ophthalmia and tuberculosis seems to be the most natural conclusion from some reports made by Borden, Veeder and Hempelmann to the American Pediatric Society (Med. Rec. 8-21). In 195 children with phlyctenular conjunctivitis, the skin tuberculin tests were positive in more than 92 per cent and the results were also confirmed by the complement fixation test. Tuberculous lesions in organs other than the eye were found in more than one-half the cases. Clinical evidence of tuberculosis were developed in 80 per cent of the children who were observed for one year or more.

Andrin (Paris) believes that whooping-cough can be cured by injections of either,

Rarely more than three injections are required. The ether is injected into the buttock. One c. cm is injected in children up to 7 or 8 months. In older children 2 c. cm can be given every two days.

Once upon a time the State Society met in Atchison. It was a pretty live town in those days, perhaps not quite so large as now—but the society was smaller. At one of the sessions a member reported a case of albuminuria in which there was a very large amount of albumin and on one day the patient being unable to void urine he introduced a catheter, but without result. On withdrawing the catheter he found the eyelet filled with coagulated albumin. He was not dismayed—he simply injected a syringe full of essence of pepsin, waited ten minutes, again introduced the catheter and a large amount of perfectly clear urine was passed.

The tincture of iodine is seldom given internally in this country and from one to five drops is considered a sufficient dose for internal administration. One therefore, may be a little surprised at the suggestion of Dufour (Paris) that the most successful mode of treating tuberculous adenitis is by oral administration of freshly made tincture of iodine in doses of from 120 to 150 drops daily in milk.

A case of congenital atresia of bile ducts in a child of 4 months is reported by Hutchinson and Fleming (Glasgow Med. Jr.). Although no bile entered the intestines, analysis of the stools showed that the digestion of fat by fat-splitting was only slightly inhibited. Fat absorption however was greatly diminished. From this it was concluded that bile has a slight influence on the lipolytic properties of the pancreatic secretion, but that its chief part is to aid fat absorption.

Some years ago a physician who practiced in a town of about 500 inhabitants read a paper before the Kansas Medical Society in which he reported 2400 cases of glycosuria occurring in his practice. This man had been finely educated and was at one time a promising young specialist on nervous diseases in a large eastern city but—

Discussing the subject of resuscitation in death under anesthesia in the British Medical Journal (Nov. 6) Fisher calls attention to the advantages of the early use of cardiac massage. He insists that after thirty minutes cessation of heart beat no method of resuscitation will avail because the delicate fabric of the central nervous system will

not survive the deprivation of its vascular nutrient supply longer than thirty minutes. When the heart has ceased its action cardiac massage offers the greatest promise of results through artificial respiration may be tried for one or two minutes, not longer. Cardiac massage when properly practiced is itself the most efficient method of artificial respiration.

Under the provisions of the prohibition law which was passed in 1881 liquor could be sold on a physicians prescription. Dr. T. A. Stevens of Caney tells a story of a doctor who lived near his town and who had a very large practice. This doctor was, however, unable to reap the harvest which the new law provided for him because he was unable to write. One of his thirsty patients solved the problem for him. "The picture of a bottle was made on a prescription blank. If it was for a pint a line was drawn just below the cork; for a half-pint a line across the middle. The patient would sign the doctor's name and the doctor would make his 'X'."

The Physicians and Surgeons Adjusting Association, Railway Exchange Building, Kansas City, Missouri, issues free membership certificates to doctors patronizing the Association's collection service. The Association's announcement appearing in another column is self explanatory.

Surgical General H. S. Cummings, of the U. S. Public Health Service, is determined to see that every one of the 15,000 tuberculosis patients in the Public Service hospitals shall have the best treatment to be had in any hospital in the land. To make sure that they shall miss nothing, he has requested a number of eminent specialists in tuberculosis, not members of the Public Health Service, to visit all service hospitals and to study the conditions at each with a view to standardization and to making any improvements that may suggest themselves. Doctors David Lyman, of Wallingford, Conn., Victor Cullen of the Maryland State Sanitarium, and Martin E. Sloan, of Towson, Md., will officiate in the eastern States; Dr. George Thomas Palmer, Springfield, Ohio, in the central States; and Dr. Henry Hoagland and one or more others in the South Western States. About two weeks will be spent in each hospital.

Recognizing the fact that the utility of adrenalin in therapeutics hinges upon its remarkable contractile effect upon the small blood-vessels, the physician readily accepts it as the most available styptic we have. Its action is manifested whether it be applied

directly to the exposed vessel, administered subcutaneously in the bleeding area, or, as in intestinal hemorrhage, given intravenously. When applied locally the response is so vigorous that the tissue is actually blanched; and in combination with local anesthetics it prevents excessive bleeding during and after operations on mucous membranes and other structures.

In the advertising section of this issue the reader will find the fourth of a series of little essays on "Adrenalin in Medicine," in which the topic discussed is "The treatment of Hemorrhage." While most practitioners are more or less familiar with the therapeutics of adrenalin, a perusal of this brief article will serve to refresh the memory of any one who has momentarily lost sight of this remarkable and dependable agent in minor surgery. A notable point that may have been overlooked is that adrenalin not only controls bleeding by vasoconstriction, but it also shortens the coagulation period, whereby it occupies a distinctively unique position among hemostatics.

It has been asserted that ingestion of saccharin increases the catalase content of the blood; that catalase increases oxidation in the animal organism, and hence that the use of saccharin by diabetics might be of value. However, the alleged content of catalase remains improbable and unproved. Further, recent investigations show that administration of saccharin, even in huge amounts, does not increase oxidation in the animal body. Saccharin is neither a food nor a potent drug. Its usefulness in dietotherapy is limited to the function of taste (*Jour. A. M. A.*, Nov. 13, 1920, p. 1347).

There is no scientific evidence that common colds can be prevented by the use of vaccines, despite the glowing recommendations of vaccine makers and the patter of the detail man. Colds characterized by catarrhal inflammation of the mucous membranes of the nose and the throat are caused by various organisms. The organism concerned in one epidemic is different from that in another. It is impossible to anticipate what organism is about to invade the household or community. Inoculation of mixed vaccines fails to produce immunity (*Jour. A. M. A.*, Nov. 13, 1920, p. 1361).

The Medical Protective Company of Fort Waynes, Ind., announces that it is now providing added indemnity for the protection of the physicians where desired. The company has just completed statistics on the amount of money involved in judgments that have

been rendered in the past few years and finds that the number of judgments in excess of \$5,000 in 1915 was a little over 1 per cent, while in 1920 the ratio of judgments in excess of \$5,000 was a trifle less than 54 per cent. This indicates that courts and juries are now assessing higher damages against physicians found guilty of malpractice than they did in 1915. The Medical Protective Company has met this situation by preparing an added indemnity clause increasing the amounts available for the payment of judgments to \$10,000 in a single case and \$30,000 in any number of suits growing out of services rendered in any one year. The premium for this additional will be \$6, making a total premium of \$21 for indemnity in the larger amounts. Physicians whose policies are now limited to \$5,000 and \$15,000, respectively, may take advantage of this enlarged protection by having a rider attached to their present policies on the payment of the extra premium of \$6. (Jr. Mo. State Med. Soc.)

R Books

Operative Gynecology by Harry Sturgeon Crossen, M. D., F. A. C. S. Associate in Gynecology, Washington University Medical School. Associate Gynecologist to the Barnes Hospital, etc. Second edition. Eight hundred thirty four original illustrations. Published by C. V. Mosby Co., St. Louis. Price \$10.00.

In this edition the author attempts to reclassify the operations for prolapse of the uterus and bladder, believing that such a classification should show at a glance the relation of the operation to the anatomical structures involved and also its relation to other operations employed. The author should be commended for substituting descriptive anatomical terms for the names of men who may have originated an operation and by which it is commonly known. To describe an operation by a man's name means nothing to those not very familiar with the subject. Much new matter has been added in the second edition and many new illustrations.

Lippincott's Nursing Manuals—Care and Feeding of Infants and Children. A text book for trained nurses, by Walter Reeve Ramsey Assoc. Prof. Diseases of children, University of Minnesota, etc. Published by J. B. Lippincott Co. Philadelphia.

While this book is intended for a text book for trained nurses it might well and profitably be placed in the hands of every intelligent mother. The instructions given for the care of infants are plainly set forth. Many things about the care of infants are so carefully described and so well illustrated that

any woman of ordinary mind should be able to understand them.

The Medical Clinics of North America, Volume 4, Number 2. Boston number (Sept., 1920.) Published bi-monthly by W. B. Saunders Co., Philadeluria and London. Price per Volume \$12.00.

In the Boston number of Medical Clinics of North America one of the very excellent articles is by Wm. D. Reed on "The Diagnosis of Mitral Stenoses." Another very interesting article is by Stanley Cobb on "Spastic Paralysis in Children." Edwin A. Locke presents a clinic showing two cases of empyema complicating pneumonia. Dr. W. Richard Ohler has an article on renal function tests in which he describes the various methods of making tests and the application to every day problems of diagnosis. Dr. John Lovett Morse has a clinic presenting an infant who has constipation and eczema due to an excess of fat in modified milk. There are many other very interesting reports in this number.

The Surgical Clinics of Chicago. Volume IV, Number V, (June, 1920). Octavo of 223 pages, 45 illustrations. Philadelphia and London. W. B. Saunders Company, 1920. Published Bi-Monthly. Price per year: Paper \$12.00; Cloth \$16.00 net.

The first article in the Surgical Clinics of Chicago for October is the report of a clinic on "Dumping Stomach" by Dr. E. Wyllys and Edmond Andrews and Dr. Chas. L. Mix. It presents also other results of gastrojejunostomy and describes the operative cure by disconnecting old stroma. This report is well illustrated. Straus has a clinic on perinephritic abscess. Bevan and Gatewood present a case of mesenteric fibroma. Dr. Kellogg Speed has an article on burns. He presents a study of 496 cases of burns. He gives the first aid treatment and subsequent management. He also describes the ambrine method giving the technic of application. Eisendrath has a clinic on infections of the kidney presenting two cases to illustrate different types of infection. These are only few of the many valuable contributions to this number of the clinics.

Practical Dietetics with reference to diet in health and disease by Alida Frances Pattee graduate Department of Household Arts, State Normal School, Farmingham, Mass. Thirteenth Edition revised. 12 mo. cloth 543 pages. Published by A. F. Pattee.

This seems to be a very practical and comprehensive work on diet. Special attention has been given to the preparation of food for the invalid. Many very excellent formulas are given and from these may be

selected to suit most any palate. Diet lists for various diseases are also given.

Diabetes, a hand book for physicians and their patients by Philip Horowitz, M. D. Twenty seven text illustrations and two colored plates. Published by Paul B. Hoeber, New York. Price \$2.00.

The author has given a series of carefully calculated and thoroughly tested diets for diabetic patients. These are so planned that the dietetic requirements of these cases may be easily estimated and the menus adjusted accordingly.

R

SOCIETIES

Bourbon County Society

The Bourbon County Medical Society met in regular session Nov. 15, with thirteen members in attendance.

This was the first meeting for some time on account of summer vacation and that the doctors had been busy with their routine work.

Dr. Hopper reported two cases of eye injuries that had recently occurred in his practice outlining his methods of dealing with the conditions presented.

The prevailing epidemic of diphtheria was discussed by all present and it was the opinion of all that more stringent methods be taken with all contacts that the disease be eradicated.

A number of cases were reported that had only the clinical symptoms and appearance of tonsilitis but in which the bacillus of diphtheria was found after culturing smears, and making microscopical examination.

The promptness of the laity to attribute all sequallae to the action of antitoxin and not to the disease was brought out in the discussion, and the necessity for the doctor impressing upon his patrons that antitoxin had no injurious after effects and that its sole role was only that of "life saver" when given early and in sufficient dosage.

It was agreed that at the next meeting a banquet be served at the Hotel Goodlander to which the wives of the members be invited.

Drs. Young and Jarrett were appointed a committee on program and arrangement for the banquet and their being in charge leads us to anticipate something more "Than the

usual run for our money" on that occasion.
John C. Lardner, Sec.

Fifteenth Annual Meeting of the Medical Association of the Southwest Held at Wichita, Kans., Nov. 22-24

The 15th annual meeting of the Medical Association of the Southwest which was held in Wichita this year while not quite so largely attended as usual was really more interesting than usual; the smaller attendance could probably be accounted for by the fact that it followed the Southern meeting and the College of Surgeons so closely; but all who attended said they had never attended a better meeting in the district.

There were about three hundred members present about fifty of which were ex-service men and who enjoyed a reunion the first day.

The report of the Secretary-Treasurer showed more members had paid dues this year than in any previous year and that the association was free from any debt. The hardship in maintaining the journal due to the great increase in everything that enters into the publication of the same was freely discussed and a resolution of commendation for the conduct of the journal especially with references to its advertising policy unanimously passed.

The features of the scientific program this year were the two splendid addresses made by Dr. F. M. Pottenger of Monrovia, Calif., and Dr. J. H. Stokes of The Mayo Clinic of Rochester, Minn. Dr. Pottinger certainly impressed every one present with the need for greater proficiency in the diagnosis of tubercular conditions as did Dr. Stokes that of syphilis.

The scientific program was unusually good and the clinics held each forenoon in every hospital in the city proved very interesting to all in attendance.

The officers elected for the ensuing year were:

President—Dr. E. H. Skinner, Kansas City, Mo.

Vice President—Dr. W. W. Rucks, Oklahoma City.

Vice President—Dr. J. T. Axtell, Newton, Kansas.

Vice President—Dr. H. Moulton, Fort Smith, Ark.

Vice President—Dr. R. H. Needham, Fort Worth, Texas.

Secretary-Treasurer—Fred H. Clark, Oklahoma City, Okla.

The next meeting is to be a joint meeting with the Missouri Valley Medical Society and will be held in Kansas City, Mo. Beginning Oct. 4th, 1921.

Clay County Medical Society

It is the habit of the Clay County Medical and Dental Societies to hold a joint session and banquet annually. This session and banquet were held Thursday evening, November 4th, in the elegant dining room of the Bonham Hotel.

It is our custom to invite the wives, daughters and sweethearts of the doctors. Also to invite the County Red Cross nurse and the nurses at the hospital to a seat at this function.

The medics and dentists take turns furnishing the lecturer for this occasion, and this being the medics' turn, we were honored by an address by Dr. Karl A. Menninger of Topeka, Kansas. His subject was "Mental and Neural Manifestations Following Flu." His lecture began by giving us the most instructive talk on the history of the classification of these manifestations that we have ever listened to. This done, he illustrated these manifestations by giving the history of cases, taken mostly from his own clinics.

The society has listened to many fine lectures, but this one must be classed among the very best. The lecturer was roundly applauded, invited to come often, and made an honorary member of our society. Miss Eckert, the County Red Cross nurse, gave an outline of the splendid work she is doing.

The guests of honor were Dr. Menninger and Dr. and Mrs. Speer. Dr. Speer has lived here for seven years, during which time he has built up a large practice, became influential in community affairs, and he and Mrs. Speer have made for themselves an

enviable place in the social and church life of the community. The doctor is an able physician and surgeon, and this Society and the community will keenly feel the loss of himself and wife. Mrs. Dr. Weaver, for the dentists, and Dr. B. F. Morgan, for the medics, gave the farewell toasts for Dr. and Mrs. Speer.

Dr. E. C. Morgan, Pres.
Dr. James A. Miller, Sec.

R**C. & C. Bureau**

Every week shows a little more interest in the Bureau. In order that this work may be made the success it should be made every member of the society must take advantage of its facilities. You must not expect the Bureau only to help you, but you must help the Bureau to help others. It must be a co-operative system. The man who refuses to pay Dr. A. will most likely also refuse to pay you. In sending in your accounts, give the name in full if possible, the occupation if known or can be learned, the correct address or the last known address.

The Bureau would like to have the present addresses of the following. If you can aid in locating any of these parties you will be helping the Bureau, helping yourselves and will probably be doing a favor to the parties themselves.

Present Addresses wanted for the following.

Last known address

Balthus, Lewis.....St. John, Kans.
Ballinger, Chas.....Topeka, Kans.
Betterton, C. C.....709 Van Buren, Topeka, Kans.
Carrell, Mr. Luther.....Chanute, Kans.
Dodson, Ben.....Arkansas City, Kans.
Donahue, Pat.....Mayetta, Kans.
Duigman, F. C.....13th & Yecker, Kansas City, Kans.
Duigman, J. C.....13th & Yecker, Kansas City, Kans.
Eames, E. E.....Frankfort, Kans.
Edwards, Williams.....Hartford, Kans.
Eldridge, Mr. E. E.....Los Angeles, Calif.
Frisson, F. G.....839 Minn. Ave., Kansas City, Kans.
Flynn, Mike.....Wheaton, Kans.
Fravel, Ira.....425 East F. St., Hutchinson, Kans.
Gardner, Mr. H. T.....Upton, Ky.
Gavin, Mr. Peter.....Bareley, Kans.
George, Miss Jessie 325 East A. St., Hutchinson, Ks.
George, G. C.....Quinter, Okla.
Green, Rolland.....Council Grove
Hamilton, L. H.....1016 W. 8th, Topeka, Kans.
Hammon, Mr. C.....Med. Corps, Ft. Riley, Kans.
Hilton, Fred.....Emporia or Eldorado, Kans.
Hoffman, W. H.....1003 E. 5th St., Kansas City, Mo.
Holliday, A. A.....Lawson, Okla.
Howard, J. B.....Orlando, Okla.

Hutton, J. C.....Emmet, Kans.
Jennings, W. S.....Stafford, Kans.
Lee, I. H.....Horton, Kan. or Childress, Texas
Lomax, Mrs. Pearl.....Havensville, Kans.
Mitchell, J. W. 602 East 3rd St., Hutchinson, Kans.
Mitchell, Mr.708 Brooks, Topeka, Kans.
Orr, John.Topeka, Kans.
Pottinger, Mr. Arthur. 806 East 8th, Topeka, Kans.
Powell, Mr. Benjamin 517 Harter St. Hutchinson, Ks.
Richardson, Arnett.....Sterling, Kans.
Riegle, U. B.....La Crosse, Kans.
Roberts, Geo. F.....Erie, Kans.
Shaw, Floyd.Winfield, Kans.
Smith, Lee Messer.....Great Bend, Kans.
Smith, Mrs. Julis. 31 N. 6th St., Kansas City, Kans.
Stoctor, N. B.....Burlington, Kans.
Stotts, Fred.....Hudson, Kans.
Thomas Donally.Topeka, Kans.

R**Primary and Secondary Nitrous Oxid Saturation as a Test for Determining the Operability of Patients.**

Dr. E. I. McKesson, Toledo, Ohio:—We are occasionally asked to anesthetize patients who may be generally regarded as inoperable. Without the proposed operation death may be inevitable and with it more than probable. Operability of a patient may depend on factors aside from vitality or compensatory powers. It may depend on the duration and sort of operation, the surgeon, the anesthetist, the anesthetic and other measures calculated to prolong life. It is a delicate situation in which any member of the surgical team may cause disaster on the table and in which even the most intelligent cooperation of all concerned may not be able to avoid a fatal outcome. When a normal pulse rate is reduced the blood pressures usually fall from 25 to 50 per cent of the difference in the pulse rate and conversely when the pulse rate increases, the blood pressures rise. A patient who has a pulse rate of 120 or over may develop a slower heart beat under anesthesia with a slight increase of blood pressures or the pressures may remain stationary while the pulse rate becomes slower. Such a condition is a good omen and not an indication of circulatory depression. When changes in pulse rate are not accompanied by the mentioned changes in blood pressure we have some degree of circulatory depression. Primary and secondary nitrous oxid saturation, at one phase, increases the pulse rate and immediately following decreases the pulse rate and blood pressures. During reoxygenation when the oxygen reaches the blood stream the pulse rate and blood pressures immediately return to their former readings. This is the normal response to nitrous oxid saturation and reoxygenation. Now in moribund cases there is more or less serious circulatory depression to begin with and primary nitrous oxid

saturation followed by a breath or two of oxygen may show an increased circulatory depression for 3 to 5 minutes, and this response to the test contraindicates any but extremely short and simple operative procedures. A deeper and more searching test is needed to determine the operability of doubtful patients presented for abdominal or other major operations. For this purpose I have often resorted to primary and then secondary saturation, noting the effect of each on the pulse rate and blood pressure ratios for 3 to 5 minutes after reoxygenation. If the pulse is increased as much as 25 per cent and the blood pressures are decreased 25 per cent or more, establishing second degree circulatory depression, and the patient, while inhaling oxygen, is unable to compensate within 5 minutes, he may be regarded as absolutely inoperable for major surgery in the hands of the best surgical team. Patients are being shocked to death every day under all anesthetics, who would easily pass the saturation test as detailed. The anesthetist must properly rate himself and his team and patient, denying none who might live if operated upon and refusing all those who will die during surgical procedures. I have had no deaths or serious seares as a result of either primary or secondary nitrous oxid saturation for relaxation or as a test of operability. The use of the test in relation to the pulse rate and blood pressure ratios has enabled me to eliminate inoperable patients who shortly afterwards died from the effects of their pathological conditions without operations. (N. A. R. S.—Proceed.)

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Will it Pay to Continue the Fight on Venereal Diseases?

According to the census reports there are in the United States approximately 10,148,000 men between the ages of 20 and 30 years. The draft found that 5.6 per cent of men between these ages are infected with a venereal disease. This means that 568,000 young men between 20 and 30 years are infected. But not all the men infected are within this age group. An analysis of the venereal disease cases reported in one of the states during 1919 showed that only half of those diseased were between the ages of 20 and 30 years. Upon this basis it may be assumed that the total number of men venereally diseased in the United States is not less than 1,136,000.

As to the number of women infected it was found in the analysis of this same state report that 73 per cent of the cases reported were men and 27 per cent women. Apply-

ing the ratio between men and women, there would be 420,000 infected women in the United States, making a total of 1,556,000 venereally diseased persons.

The average loss of time for each man in the Army who had a venereal disease was slightly more than twelve days per year. This rate is obtained from the Surgeon General's report for 1919. In this report he says: "Venereal diseases were also of great importance in the army on account of the loss of time occasioned. The total time lost for officers and enlisted men, American and native troops, serving at home and abroad, amounted to 3,937,710 days. 10,788 men and officers were absent from duty each day of the year on account of this class of diseases."

Estimating that men between 20 and 50 years earn an average of \$4.00 per day—a moderate figure at present prices of labor—and that men from 15 to 20 and over 50 years earn \$3.00 per day, it is seen that the total earnings of the men in the United States who are infected with venereal disease should be about \$4,500,000 per day. But if these diseases render a man ineffective twelve days of the year, they earn about \$150,000 less per day, which is an annual loss of \$54,000,000.

By a similar calculation and by assuming that women earn daily \$1.00 less than men, the total in the earnings of women who are infected with venereal diseases is over \$15,000,000 per year.

This makes venereal diseases cost this country in wages alone more than \$69,000,000 a year.

And yet this amount represents only the value of time lost on account of these diseases. It does not include the loss they cause through inefficiency and decreased production.

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Treatment of Leprosy With Dean Derivatives of Chaulmoogra Oil

An apparent cure of leprosy was obtained by J. T. McDonald, Honolulu, H. I. (Journal A. M. A., Nov. 27, 1920), chaulmoogra oil, known also as oil of gynocardium, was used. Standard treatment for weekly intramuscular injection consists in the use of the ethyl esters of the entire fatty acids of the whole oil with 2 per cent of iodin by weight chemically combined, the dosage of which begins with 1 c.c. and is increased by 1 c.c. at every second or third injection until from 2 to 6 c.c. is reached, according to the age and weight of the patient. Internally, patients receive in capsule form the mixed fatty acids carrying 2.5 per cent iodin in chemical combination;

the fatty acids, rather than their ethyl esters, because they better conform to the normal digestive process which precedes fat absorption; we are therefore using by mouth a predigested oil or fat which is semisolid at room temperature, and, in capsule, very easy to take. Its dosage begins with one-sixth gm. per hundred pounds of the patient's weight, three times a day, an hour or two after meals. This is gradually increased every two weeks until the maximum of 1 gm. per hundred pounds of weight per dose is reached. Of these two forms of administration, McDonald regards the injection as the vastly more important. In 6,924 deep injections there has been but one case of resulting abscess.

R**Great Hospital and Medical School at Cairo**

The Egyptian government has decided to build at Cairo what is officially described as "the finest and most complete medical school and hospital in the world." It is to contain 1,225 beds and will have accommodations for 3,000 outpatients each day. Attached will be a completely equipped medical school, which will be connected with the projected university. The staff of the hospital will be both British and Egyptian. The existing Kasr el Aini Hospital, built by Mohamed Ali early in the last century, has become inadequate to the needs of the city. Mr. John W. Simpson, president of the Royal Institute of British Architects, who was engaged as consulting architect, selected the site and formulated the requirements in consultation with the government, and drew up conditions for an international competition. His recommendations were accepted, and invitations to architects to compete will shortly be issued in English, French, Italian and Arabic. The work will be one of the largest and most important in the world. The site selected consists of 48 acres in the northern part of Roda Island, which is south of the main city of Cairo. It is thus free from the dust of the desert stretching east of Cairo, and commands a magnificent prospect. (Jr. A. M. A., Dec. 4.

R**Hemorrhoidectomy**

A composite operation is described by E. G. Martin, Detroit (Journal A. M. A., Nov. 27, 1920). The patient is placed in the left lateral Sims position; the field of operation is anesthetized with a 1 per cent solution of sterile procain or its equivalent. After dilatation, a bivalve speculum is introduced; following his a dry sponge is placed beyond the internal sphincter to prevent soiling of the operative field. The hemorrhoid is care-

fully grasped with the battle-ax forceps and drawn out tensely, care being used not to traumatize unnecessarily the anal mucous membrane and skin. An artery forceps is clamped above the hemorrhoid; the battle ax is substituted for a sharp toothed dressing forceps to facilitate more accurate treatment, when the redundant part of the pile is cut away; again using the tooth forceps, all hemorrhoid tissue below the anal surface in this region is dissected out with pointed lateral curved scissors. Hemorrhage is controlled by ligature and suture. This technic is carried out and completed successively with each hemorrhoid, after which the parts are sponged, the gauze removed from the rectum, and a small rubber tube about one-fourth inch in diameter inserted through the anal canal into the rectum; this tube drains any accumulation of fluid from the rectum, and should be removed, for the patient's comfort, at the end of the day.

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"A short-sighted view"; was Surgeon General Cumming's terse comment on the opinion expressed at the recent Bankers' Convention that federal aid should not be given to states for activities carried on in state and local communities. "In health work, especially," said the Surgeon General, "it is extremely important to recognize that the prevalence of communicable diseases in one part of the country is of very direct influence on the people elsewhere. Thus the investigations of the U. S. Public Health Service have clearly shown that the use of a polluted water supply in some remote rural district has often resulted in extensive outbreaks of typhoid fever in large cities hundreds of miles away; the presence of malaria in certain parts of the south has exacted a heavy economic toll from the country as a whole, for example, by raising the cost of cotton to the consumer; the northern investor has paid dearly for the continued prevalence of hook worm disease in various parts of the country, for where this disease prevails labor efficiency is seriously reduced."

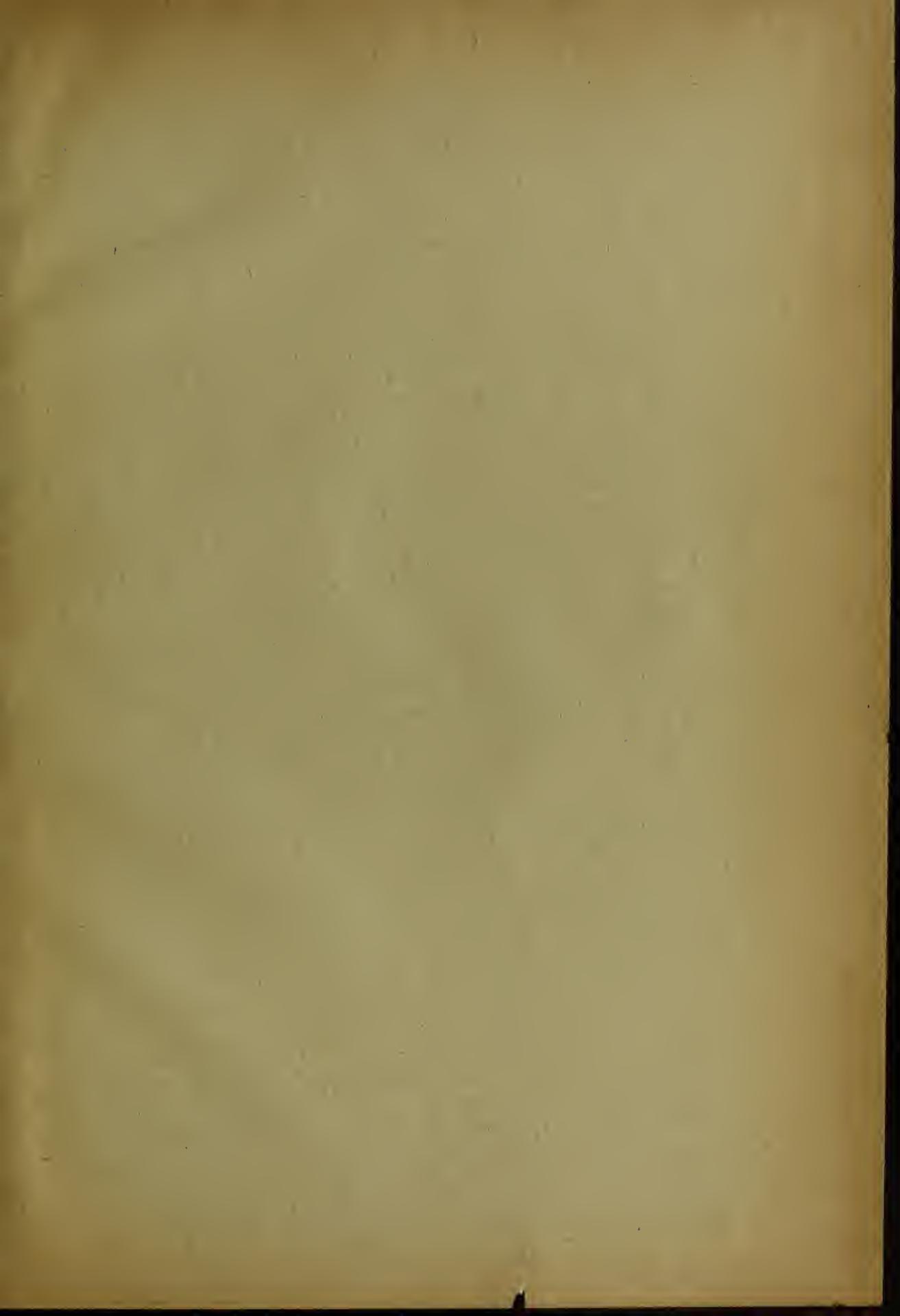
"When the circumstances are carefully studied it is clear that the control of disease is not merely a local responsibility, but a joint responsibility of federal, state and local authorities."

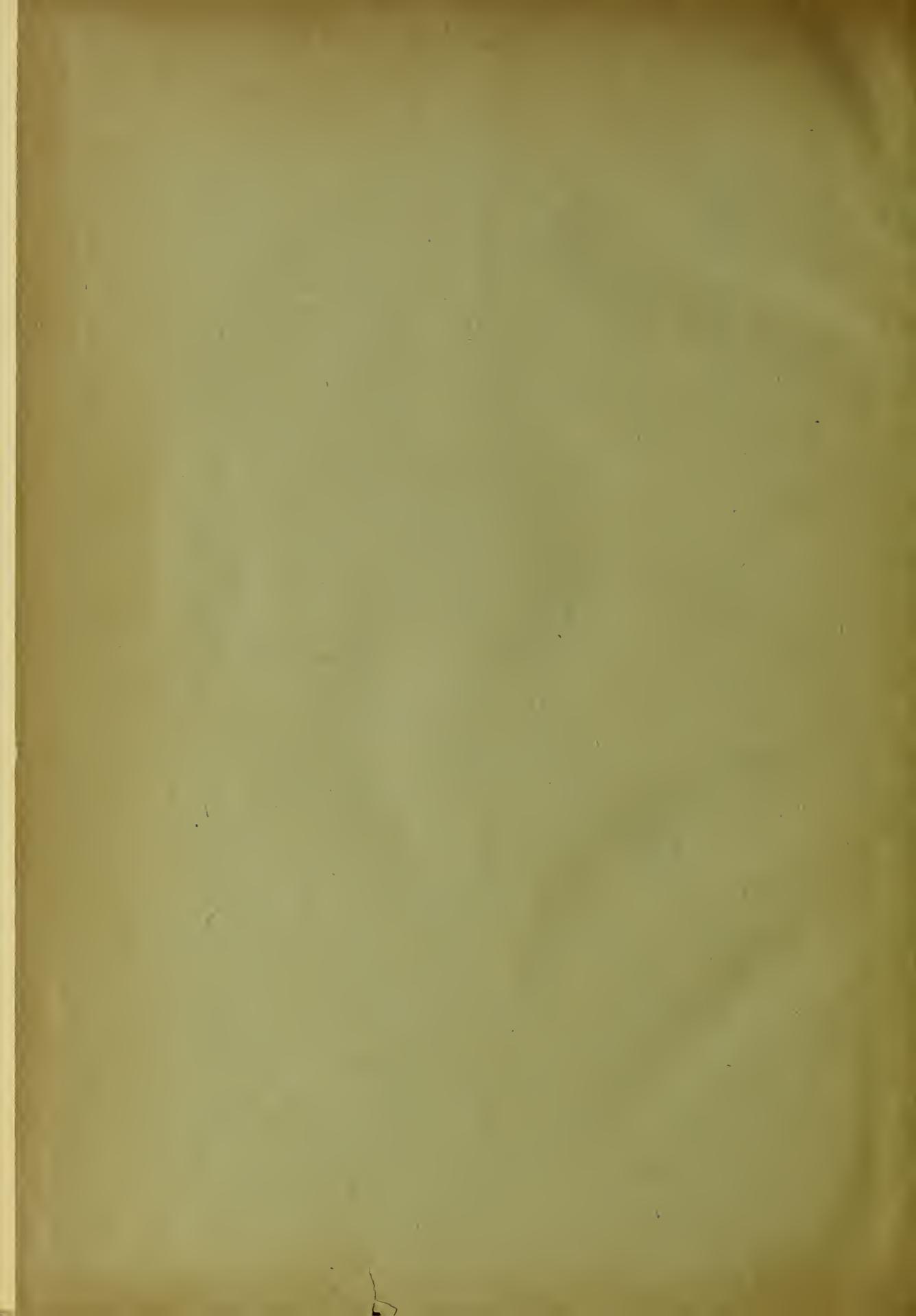
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Mineral oils should not be used as excipients in medicinal injections.

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The blood can function in very narrow limits owing to its sensitiveness to acids.





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